VOL. I.

91279

TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.
OCTOBER TERM, [redacted] 1921

Term No. [redacted] 251

CHARLES D. NEWTON, AS ATTORNEY GENERAL OF THE STATE OF NEW YORK, EDWARD SWANN, AS DISTRICT ATTORNEY OF THE COUNTY OF NEW YORK AND [redacted] NIXON, CONSTITUTING THE PUBLIC SERVICE COMMISSION OF THE STATE OF NEW YORK, FIRST DISTRICT, APPELLANTS,

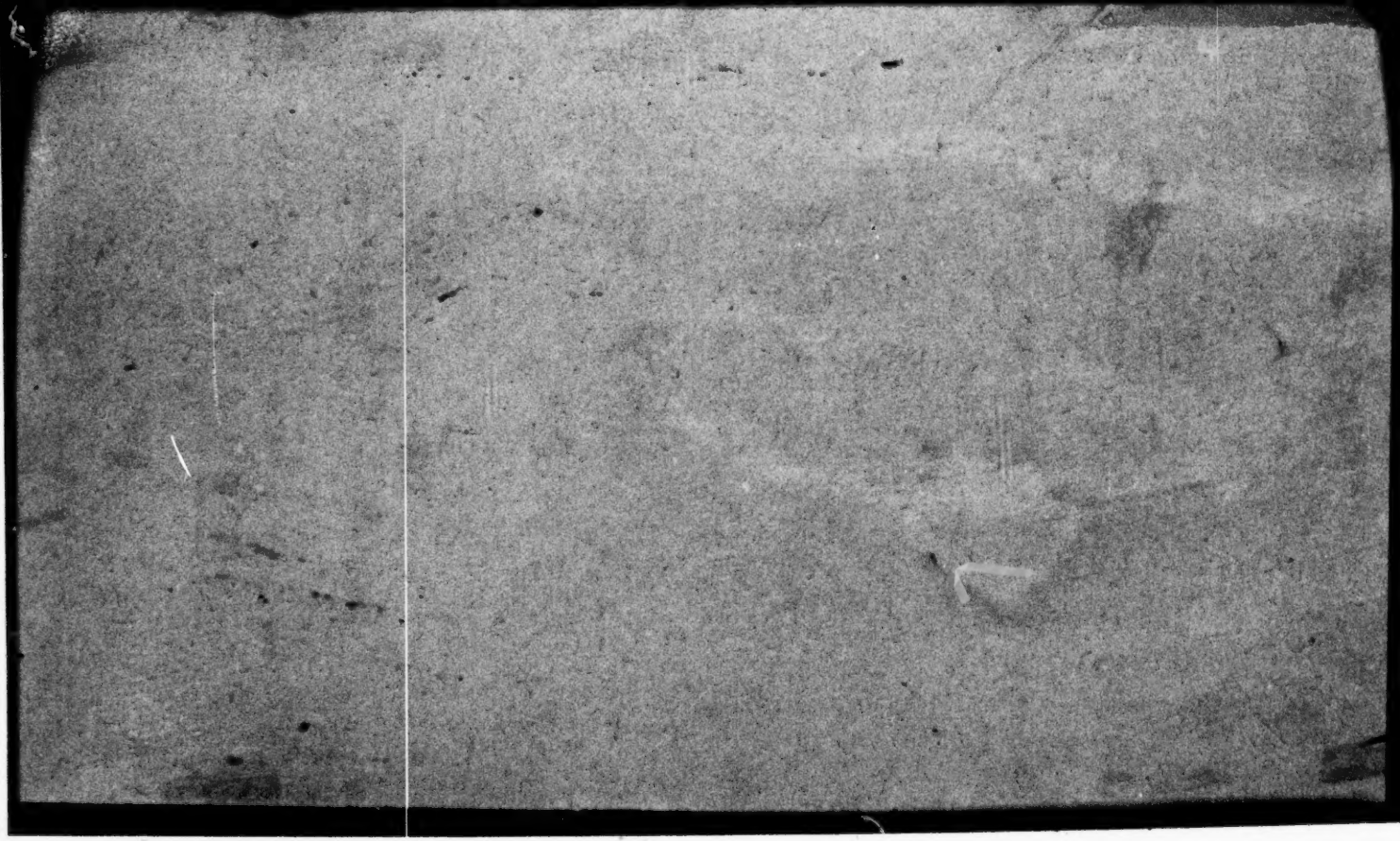
vs.

CONSOLIDATED GAS COMPANY OF NEW YORK, RESPONDENT.

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK.

FILED MARCH 17, 1921

(File No. 28164.)



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Bill of Complaint.

District Court of the United States, Southern District of New York. In Equity.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
against
CHARLES D. NEWTON, as Attorney-General of the State of New York; EDWARD SWANN, as District Attorney of the County of New York, State of New York, and TRAVIS H. WHITNEY, CHARLES S. HERVEY and FREDERICK J. H. KRACKE, constituting the Public Service Commission of the State of New York, First District, Defendants.

To the Honorable, the Judges of the District Court of the United States for the Southern District of New York:

The Consolidated Gas Company of New York, a corporation organized and existing under the laws of the State of New York, and having its principal place of business in the County of New York, Borough of Manhattan, City of New York, in the Southern District of New York, brings this its Bill of Complaint against Charles D. Newton, as Attorney-General of the State of New York, Edward Swann, as District Attorney of the County of New York, State of New York, and Travis H. Whitney, Charles S. Hervey and Frederick J. H. Kracke, constituting the Public Service Commission of the State of New York, First District; and thereupon your orator alleges, upon information and belief, and complains:

I. Your orator is a corporation, duly incorporated for the purpose of manufacturing and selling gas in the City and County of New York, under and by virtue of a Consolidation Agreement duly executed on September 29, 1884, pursuant to a statute of the State of New York, entitled, "An Act to Authorize the Consolidation of Manufacturing Corporations", known as Chapter 367 of the Laws of 1884. The said Consolidation Agreement was executed by the New York Gas Light Company, The Manhattan Gas Light Company, The Metropolitan Gas Light Company of the City of New York, The Municipal Gas Light Company of New York, The Knickerbocker Gas Light Company and The Harlem Gas Light Company, all of which were corporations theretofore duly organized and existing under the laws of the State of New York, with the property, powers and franchises hereinafter referred to. The said Agreement was thereafter duly filed in the offices of the Secretary of State of the State of New York and of the Clerk of New York County, on November 10, 1884, pursuant to the said statute. Your orator was duly organized as a corporation thereunder, to continue for fifty years, by virtue of the said Consolidation Agreement

and of the aforesaid statute; but, under the laws of New York, its corporate existence may, at any time, be extended, upon the consent of two-thirds in amount of the stockholders.

II. By virtue of the said Consolidation Agreement, your orator became the owner of various franchises or consents, duly obtained by its said predecessor companies, authorizing them to lay, maintain and operate mains, pipes and conductors in the streets, highways and public places of the City and County of New York; and it further became the owner of, and entitled to maintain and operate, mains, pipes and conductors theretofore laid in the various streets, highways and public places in the said City and County of New York by the said predecessor companies; and it also became thereby the owner of large and expensive works for the manufacture and distribution of gas, which had been erected by the said various predecessor companies. Your orator has, ever since, been engaged in the business of manufacturing and selling gas to the inhabitants of the said City and County of New York and to The City of New York, and has maintained and operated the said mains, pipes and conductors in the said streets, highways and public places of the said City and County of New York, and has laid additional mains, pipes and conductors therein. Your orator is required by law, under penalty, to supply gas, upon application of the owner or occupant, to all buildings and premises within one hundred feet of any mains laid by it and to furnish gas meters to its consumers without rent or charge.

III. The defendant, Charles D. Newton, is now the Attorney General of the State of New York, and resides in Geneseo, State of New York.

IV. The defendant, Edward Swann, is the District Attorney of the County of New York, State of New York, and resides in the Borough of Manhattan, City of New York.

V. The defendants, Travis H. Whitney, Charles S. Hervey and Frederick J. H. Kracke, constitute the Public Service Commission of the State of New York for the First District, which includes the City of New York, and are now acting as such Commissioners, having been duly appointed under and by virtue of the provisions of Chapter 48 of the Consolidated Laws of the State of New York, prescribing their powers and providing for the regulation of certain public service corporations, including your orator. The said defendants are citizens of the State of New York, and reside in the Borough of Brooklyn, City of New York.

VI. On May 1, 1906, your orator exhibited in the Circuit Court of the United States, for the Southern District of New York, its bill of complaint against Julius M. Mayer, as Attorney-General of the State of New York, William Travers Jerome, as District Attorney of New York County, and Frederic E. Gun-

nison, John C. Davies and Lucien L. Shedden, constituting the New York State Commission of Gas and Electricity, and The City of New York, whereby your orator sought to have Chapters 736 and 737 of the Laws of 1905 and Chapter 125 of the Laws of 1906 of the State of New York, and also a certain order of the Commission of Gas and Electricity of the State of New York, dated February 23, 1906, declared illegal and void, because in contravention of the Fourteenth Amendment to the Constitution of the United States and of Section 10 of Article I of said Constitution; and your orator further prayed that writs of injunction might issue out of said Court, restraining each of the defendants from enforcing the said Acts and order against your orator, and for other and further relief, as in said bill of complaint more fully set forth.

VII. The defendants named in said bill of complaint were duly served with process and duly appeared and, respectively, filed answers in said cause. Thereafter, said cause was duly heard; and on April 3, 1908, there was filed in said Court a final decree, adjudging and decreeing that the complainant, your orator herein, was entitled to the relief prayed for, and granting the writs of permanent injunction prayed for in said bill of complaint.

VIII. Prior to the said final decree of the Circuit Court, William S. Jackson, successor to the said Julius M. Mayer, was duly substituted as a party defendant, as Attorney-General of the State of New York; and William R. Willcox, William McCarroll, Edward M. Bassett, Milo R. Maltbie and John E. Eustis, constituting the Public Service Commission of the State of New York for the First District, were duly substituted as parties defendant for said Frederic E. Gunnison, John C. Davies and Lucien L. Shedden, constituting the New York State Commission of Gas and Electricity.

IX. Thereafter, an appeal from the said decree was duly taken to the Supreme Court of the United States by the defendants; and the said decree was by that Court reversed and the cause remanded to the said Circuit Court, with directions to dismiss the bill without prejudice; and pursuant to the mandate of the Supreme Court, the said cause was redocketed in said Circuit Court for the Southern District of New York; and on or about February 13, 1909, a decree was duly entered in said Court dismissing said bill of complaint without prejudice, in accordance with the opinion of the said Supreme Court.

X. The said decision of the Supreme Court was upon the ground that, although a return of less than six per cent. upon the value of its property would be confiscatory and although the finding of the lower Court, as modified by the Supreme Court, indicated that your orator would earn less than six per cent., yet the margin between possible confiscation and valid regula-

tion was so close that it failed to show clearly and unmistakably that the rate of eighty cents per thousand cubic feet prescribed by said act of 1906 would not afford your orator a fair and reasonable return upon the value of its property, especially in view of the fact that the said rate had never been in effect and the results upon the revenue of your orator under said rate were conjectural. The Supreme Court, in its said opinion (212 U. S., 19), recognized the constitutional right of your orator to receive a return of at least six per cent. on the fair value of its property devoted to the public use, but said that it was desirable that there should be a practical test to determine the sufficiency or insufficiency of the return, and that if such test should show that your orator could not obtain a fair return under said rate, your orator should have the opportunity to again present its case to the Court; and to that end, the decree was reversed, with directions to dismiss the bill without prejudice.

XI. By said Chapter 125 of the Laws of 1906 of the State of New York, it is provided, that no corporation engaged in the business of manufacturing, furnishing or selling illuminating gas in the Borough of Manhattan, or in the Borough of The Bronx, in the City of New York, except in that portion thereof contained in the former towns of Eastchester and Pelham and in the former town of Westchester outside the Villages of Wakefield and Williamsbridge, shall charge for gas manufactured, furnished or sold by it to the public a sum in excess of eighty cents per thousand cubic feet. The said Act provides that any corporation violating any provision thereof shall forfeit to the people of the State the sum of one thousand dollars for each offense.

XII. The value of your orator's property devoted to its gas business as of December 31, 1905, as found by the United States Circuit Court in the said former suit to review the said eighty cent law, as modified by the said decision of the Supreme Court of the United States, was $55,612,435. There has since then been added thereto, property which has cost your orator not less than $14,085,265, making the total value under normal conditions of your orator's property presently devoted to its gas business at least $69,697,700; and the cost of reproducing said property at the present time would greatly exceed that amount. In addition thereto, your orator is possessed of going value and other intangible assets of great value, many of which were omitted from the valuation of your orator's property in said former suit in the United States Circuit Court, which have since been recognized by the Courts and State Commissions as reasonable and proper; and there now exists an aggregate deficiency in your orator's earnings below six per cent., since the date the said eighty cent rate was made effective, in the amount of at least $12,000,000, which said sum should be

added to the value of your orator's tangible property above stated, as going value, upon which your orator is entitled to a return.

XIII. During the year ending October 31, 1918, the gross operating revenues from your orator's gas business amounted to $15,764,288.11, and the cost of manufacturing and distributing said gas, together with taxes and other operating expenses, amounted to $15,665,046.46, leaving a net income from the business operation of your orator of only $99,241.65, which is less than one-fourth of one per cent. on the value of your orator's investment, as hereinbefore set forth, and which represents a return of six per cent. upon a principal sum of only $1,654,027.

The present value of your orator's investment, based upon the said eighty-cent gas case, exclusive of going value and other intangible property, is, as above stated, not less than $69,697,700. The principal sum upon which a return of six per cent. is earned is, as above stated, $1,654,027; and the minimum value of the property upon which your orator is deprived of any return by the said Act of 1906 is not less than $68,043,673, while the maximum value thereof, based upon the present cost of reproduction of said property, is a much greater amount.

A return of only six per cent. upon the minimum value aforesaid of your orator's investment in its gas properties would amount to not less than $4,181,862 per annum, or 23.29 cents per thousand cubic feet of gas sold. The said net earnings of $99,241.65 for the year ending on October 31, 1918, amounted to only 55/100s of one cent per thousand cubic feet of gas sold. The deficiency in your orator's earnings during the said year below six per cent. on the minimum value of your orator's said investment amounted to $4,082,620.35, or 22.74 cents per thousand cubic feet of gas sold; and this deficiency is caused directly and solely by the arbitrarily restricted price at which your orator is compelled by the State of New York to supply gas to your orator's customers.

Your orator's average daily sales during the winter months amount to 62,728,800 cubic feet, which, at 22.74 cents per thousand, establishes as your orator's present daily loss, by reason of the said statutory rate, the sum of $14,264.53 per day, which loss your orator can by no possible means recover. This continuing daily loss is in addition to the deficiency of $4,082,620.35 in your orator's earnings during the year ended October 31, 1918.

XIV. The cost of manufacturing and distributing gas has greatly increased since the said former decree, by reason of the increase in the cost of coal, enriching oil and all other materials used in the manufacture and distribution of gas, in the large advance in the wages of employees, and in the increase

in taxes; and there is a certainty that there will be a very substantial increase in such cost in the year 1919.

XV. The value of money has greatly depreciated and is now far less than at the time of said former decree; and the purchasing power of a dollar at the present time is the equivalent of only about sixty cents at the time of said decree; so that an investor who might now receive ten per cent. upon his investment would not receive more than an investor in 1909 who received six per cent. upon his investment. A return or profit of six per cent. upon your orator's investment in its said plant and property is, therefore, no longer a fair, reasonable and adequate return upon such investment.

While the value of the dollar received by the stockholder has decreased as stated herein, the present cost of the property or similar property devoted to the public service has greatly increased; the result being that the owners of it, while receiving a return in a decreased purchasing power dollar are devoting a very greatly increased present cost investment to the public service.

XVI. The said rate of eighty cents per thousand cubic feet has, during the past year, practically deprived your orator of any return whatever upon the reasonable value of its property devoted to the manufacture and distribution of gas as aforesaid; and, at no time since the said rate went into effect, has it permitted your orator to earn a fair return thereon; and the said Act is in violation of Section 10 of Article I of the Constitution of the United States, in that it impairs the obligation of your orator's contract with the State of New York; and it is also in violation of the Fourteenth Amendment to the Constitution of the United States, in that it deprives your orator of its property without due process of law and denies to it the equal protection of the laws.

XVII. Your orator is advised by counsel, and verily believes, that the said Public Service Commission of the State of New York, for the First District, has no power to permit your orator to increase the rate which it may charge for gas supplied, in excess of the maximum rate of eighty cents per thousand cubic feet prescribed by the said Act of 1906. If your orator should so attempt to increase its said rate, it would be unable to collect the same; for it is provided by the said Chapter 48 of the Consolidated Laws of the State of New York, that the charging by any gas company of any rate in excess of that permitted by law, shall be a complete defense to any action by such company against any consumer for any unpaid bill. Furthermore, it would be the duty of the defendants herein, Charles D. Newton, as Attorney-General of the State of New York, and Edward Swann, as District-Attorney of the County of New York, State of New York, to prosecute your orator for

each such violation of law and to endeavor to enforce and collect the enormous penalties prescribed by said law; and it would be the duty of the defendants, Travis H. Whitney, Charles S. Hervey and Frederick J. H. Kracke, to cause suits in mandamus or for injunction to be brought against your orator under Section 74 of said Chapter 48 of the Consolidated Laws of New York, for the purpose of preventing your orator from so increasing its rates.

XVIII. Your orator now has more than 498,660 customers in the City and County of New York, to whom it is daily selling and distributing gas. The amount so sold and distributed during the year ending October 31, 1918, was 17,952,959,800 cubic feet. Many of said customers are financially irresponsible and only temporary residents of New York. Monthly bills for gas are rendered to such customers by your orator, and unless such bills are promptly paid, the supply of gas to delinquent customers is discontinued by your orator, as authorized by law. If your orator should make a charge to any customer, in excess of the statutory rate of eighty cents per thousand cubic feet, your orator is informed and believes that such consumer would refuse to pay such charge, upon the pretext that the making of such charge is a complete defense to your orator's entire claim against such consumer. If your orator should thereupon discontinue service to such consumers and remove the meters, your orator is advised and believes that it would be at once subjected to a multiplicity of suits from such consumers, to compel the restoration of such meters and service, as well as to prosecutions for the fines and penalties prescribed by said Act, which prescribes a penalty of $1,000 for each separate charge to any consumer in excess of the said statutory rate of eighty cents per thousand cubic feet. If your orator should make a charge in excess of said eighty cent rate each month to each of its consumers, the aggregate of the penalties so incurred in one year would amount to over $5,983,920,000, and the damage to your orator would be irreparable and absolutely destructive of all its assets, franchises and property; and a refusal or failure to observe and comply with said statute, if only for the purpose of having the same tested in good faith in a court of law, would involve a risk of absolute ruin to your orator and the entire destruction and confiscation of its property, by reason of the enormous fines for which it would be the duty of the defendants Newton and Swann to institute suit, in accordance with the requirements of Section 1962 of the Code of Civil Procedure of the State of New York. Your orator is, therefore, without adequate remedy at law for the redress of the wrongs suffered by the enforcement of said confiscatory rate and the enforcement of said Act of 1906; and such injury to your orator is irreparable except through the intervention of a court of equity.

XIX. The value of the business and property of your orator which is involved in this suit is greatly in excess of $3,000.

XX. To the end that your orator may have that relief which it can only obtain in a court of equity and that the defendants may each answer the premises, but not under oath or affirmation, the benefit whereof is hereby expressly waived by your orator, it hereby prays:

1. That it be adjudged and decreed that said Chapter 125 of the Laws of 1906 is illegal and void, because in contravention of Section 10 of Article I and the Fourteenth Amendment of the Constitution of the United States, as aforesaid.

2. That it be adjudged and decreed that your orator has no adequate remedy at law for the injury which will result from the further enforcement of said Act and that such injury will be irreparable.

3. That it be adjudged and decreed that your orator be granted a writ of permanent injunction, issuing out of and under the seal of this Honorable Court, against the defendants, restraining them and each of them and each of their officers, agents, servants and employees and any and every person acting under and by virtue of the authority of the said Act, from in any way enforcing or attempting to enforce the provisions of said Act of 1906 against your orator, or from bringing any actions thereunder to enforce the said penalties against your orator, or from bringing any actions in mandamus or for an injunction in any court whatsoever, for the purpose of compelling compliance by your orator with said Act.

4. Your orator further prays that it have such other, further or different relief as to the Court may seem meet and the nature of the case may require.

5. Your orator further prays that your Honors grant unto your orator a writ of *subpoena ad respondendum*, issuing out of and under the seal of this Honorable Court, to be directed to the said defendants, commanding them and each of them on a certain day and under a certain penalty to be therein inserted, to appear before your Honors in this Honorable Court, and then and there full, true, direct and perfect answer to make to all and singular the premises, and further to stand, do, perform and abide by such further order and decree as to your Honors may seem meet.

And your orator will ever pray, etc.

CONSOLIDATED GAS COMPANY
OF NEW YORK,
By GEORGE B. CORTELYOU,
President.

SHEARMAN & STERLING,
Solicitors for Complainant,
55 Wall Street, New York.

JOHN A. GARVER,
Of Counsel.

UNITED STATES OF AMERICA,
Southern District of New York, County of New York:

George B. Cortelyou, being duly sworn, says that he is the President of the Consolidated Gas Company of New York, the complainant named in the foregoing bill of complaint, and has subscribed to the same, and that the same is true to his own knowledge, except as to the matters therein stated to be alleged on information and belief and that, as to those matters, he believes it to be true.

Sworn to before me, January 16, 1919.

GEO. B. CORTELYOU.

M. A. COSS,
Commissioner of Deeds.
N. Y. County Clerk's No. 255
Commission expires Sept. 18, 1919.

EQUITY SUBPOENA.

The President of the United States of America, To Charles D. Newton, as Attorney General of the State of New York, Edward Swann, as District Attorney of the County of New York, State of New York and Travis H. Whitney, Charles S. Hervey and Frederick J. H. Kracke, constituting the Public Service Commission of the State of New York, First District, Greeting:

You are hereby commanded to appear before the Judges of the District Court of the United States of America for the Southern District of New York, in the Second Circuit, to answer
a bill of complaint exhibited against you in the said Court in a suit in Equity, by

Consolidated Gas Company of New York,

and to further do and receive what the said Court stall have considered in this behalf; and this you are not to omit under the penalty on you and each of you
of Two Hundred and Fifty ($250) Dollars.

Witness, Honorable Learned Hand, Judge of the District Court of the United States for the Southern District of New York, at the City of New York, on the 16th day of January, in the year one thousand nine hundred and nineteen and of the Independence of the United States of American the one hundred and forty-third.

Clerk.

SHEARMAN & STERLING, Sol'rs.

The defendants are required to file their answers or other defense in the above cause in the Clerk's office of this Court, on or before the twentieth day after the service hereof exclud-

ing the day of said service, otherwise the bill aforesaid may be taken pro confesso.

Clerk.

[SEAL.]

Answer of Defendant Newton.

District Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

CHARLES D. NEWTON, as Attorney General of the State of New York, and others, Defendants.

The defendant, Charles D. Newton, Attorney General of the State of New York, one of the defendants above named answering the bill of complaint, states as follows:

1. Denies any knowledge or information thereof sufficient to form a belief as to the allegations set forth in Paragraph "II" of the bill of complaint herein which alleges that

"By virtue of the said Consolidation Agreement, your orator became the owner of various franchises or consents duly obtained by its said predecessor companies, authorizing them to maintain and operate mains, pipes and conductors in the streets, highways and public places of the city and county of New York; and it further became the owner of, and entitled to maintain and operate mains, pipes and conductors theretofore laid in the various streets, highways and public places in the said city and county of New York by the said predecessor companies; and it also became thereby the owner of large and expensive works, for the manufacture and distribution of gas, which had been ordered by the said various predecessor companies."

II. In answer to the allegation set forth in Paragraph "X" of the bill of complaint alleges that the decision of the Supreme Court of the United States speaks for itself and said defendant does not admit fully the construction placed upon said decision by complainant as alleged in said paragraph.

III. Denies any knowledge or information thereof sufficient to form a belief as to the allegations set forth in Paragraph "XII" of the bill of complaint herein which alleges that

"The value of your orator's property devoted to its gas business as of December 31, 1905, as found by the United States Circuit Court in the said former suit to review the said eighty cent law as modified by the said decision of the Supreme Court of the United States was $55,612,435. There has since then been added thereto, property which has cost your orator not less than $14,085,265, making the total value under normal conditions of your orator's

property presently devoted to its gas business at least $69,697,700; and the cost of reproducing said property at the present time would greatly exceed that amount. In addition thereto your orator is possessed of going value and other intangible assets of great value, many of which where omitted from the valuation of your orator's property in said former suit in the United States Circuit Court, which have since been recognized by the Courts and State Commissions as reasonable and proper; and there now exists an aggregate deficiency in your orator's earnings below six per cent., since the date the said eighty cent rate was made effective in the amount of at least $12,000,000, which said sum should be added to the value of your orator's tangible property above stated, as going value, upon which your orator is entitled to a return."

IV. Denies any knowledge or information thereof sufficient to form a belief as to the allegations set forth in paragraph "XIII" of the bill of complaint herein which alleges that

"During the year ending October 31, 1918, the gross operating revenues from which your orator's gas business amounted to $15,764,288.11, and the cost of manufacturing and distributing said gas, together with taxes and other operating expenses, amounted to $15,665,046.46, leaving a net income from the business operation of your orator of only $99,241.65, which is less than one-fourth of one per cent. on the value of your orator's investment, as hereinbefore set forth, and which represents a return of six per cent. upon a principal sum of only $1,654,027.

"The present value of your orator's investment, based upon the said eighty cent gas case, exclusive of going value, and other intangible property, is, as above stated, not less than $69,697,700. The principal sum upon which a return of six per cent. is earned is, as above stated, $1,654,027; and the minimum value of the property upon which your orator is deprived of any return by the said Act of 1906 is not less than $68,043,673, while the maximum value thereof, based upon the present cost of reproduction of said property, is a much greater amount.

"A return of only six per cent. upon the minimum value aforesaid of your orator's investment in its gas properties would amount to not less than $4,181,862 per annum, or 23.29 cents per thousand cubic feet of gas sold. The said net earnings of $99,241.65 for the year ending on October 31, 1918, amounted to only 55-100s of one cent per thousand cubic feet of gas sold. The deficiency in your orator's earnings during the said year below six per cent. on the minimum value of your orator's said investment amounted to $4,082,620.35, or 22.74 cents per thousand cubic feet of gas sold; and this deficiency is caused directly and solely by the arbitrarily restricted price

at which your orator is compelled by the State of New York to supply gas to your orator's customers.

"Your orator's average daily sales during the winter months amount to 62,728,800 cubic feet, which at 22.74 cents per thousand, establishes as your orator's present daily loss, by reason of the said statutory rate, the sum of $14,264.53 per day, which loss your orator can by no possible means recover. This continuing daily loss is in addition to the deficiency of $4,082,620.35 in your orator's earnings during the year ended October 31, 1918."

V. Denies any knowledge or information thereof sufficient to form a belief as to the allegations set forth in Paragraph "XIV" of the bill of complaint herein, which alleges that

"The cost of manufacturing and distributing gas has greatly increased since the said former decree, by reason of the increase in the cost of coal, enriching oil and all other materials used in the manufacture and distribution of gas, in the large advance in the wages of employees, and in the increase in taxes; and there is a certainty that there will be a very substantial increase in such cost in the year 1919."

VI. Denies any knowledge or information thereof sufficient to form a belief as to the allegations set forth in Paragraph "XV" of the bill of complaint herein, which alleges that

"The value of money has greatly depreciated and is now far less than at the time of said former decree; and the purchasing power of a dollar at the present time is the equivalent of only about sixty cents at the time of said decree; so that an investor who might now receive ten per cent. upon his investment would not receive more than an investor in 1909 who received six per cent. upon his investment. A return of profit of six per cent. upon your orator's investment in its said plant and property is, therefore, no longer a fair, reasonable and adequate return upon such investment.

While the value of the dollar received by the stockholder has decreased as stated herein, the present cost of the property or similar property devoted to the public service has greatly increased; the result being that the owners of it, while receiving a return in a decreased purchasing power dollar, are devoting a very greatly increased present cost of investment to the public service."

VII. Denies any knowledge or information thereof sufficient to form a belief as to the allegations set forth in Paragraph "XVI" of the bill of complaint herein which alleges that

"The said rate of eighty cents per thousand cubic feet has, during the past year, practically deprived your orator of any return whatever upon the reasonable value of its property devoted to the manufacture and distribution of gas as aforesaid; and, at no time since the said rate went into effect, has it per-

mitted your orator to earn a fair return hereon; and the said Act is in violation of Section 10 of Article 1 of the Constitution of the United States, in that it impairs the obligation of your orator's contract with the State of New York; and it is also in violation of the Fourteenth Amendment to the Constitution of the United States, in that it deprives your orator of its property without due process of law and denies to it the equal protection of the laws."

VIII. Denies any knowledge or information thereof sufficient to form a belief as to so much of the allegations set forth in Paragraph "XVIII" of the bill of complaint which alleges that complainant has more than 498,660 customers in the city and county of New York to whom it is daily selling and distributing gas, and that the amount so sold and distributed during the year ending October 31st, 1918, was 17,952,959,800 cubic feet and that many customers are financially irresponsible and only temporary residents of New York and the damage to your orator would be irreparable and absolutely destructive of all its assets, franchises and property; and a refusal or failure to observe and comply with said statute, if only for the purpose of having the same tested in good faith in a court of law, would involve a risk of absolute ruin to your orator and the entire destruction and confiscation of its property, by reason of the enormous fines, and that your orator is therefore without adequate remedy at law for the redress for the wrongs suffered by the enforcement of said confiscatory rate and the enforcement of said Act of 1906, and such injury to your orator is irreparable except through the intervention of a court of equity.

IX. Denies upon information and belief so much of the allegation contained in Paragraph "XX" of the bill of complaint herein which alleges that complainant may obtain relief only in a court of equity.

X. Denies upon information and belief that the operation of said chapter 125 of the Laws of 1906 would cause the complainant to suffer irreparable loss or the destruction of its property rights for the reasons set forth in said bill of complaint, and said defendant denies that there is no remedy except in equity to test adequately and completely the said act.

XI. Alleges upon information and belief that the rate or rates provided for in said chapter 125 of the laws of 1906 are reasonable and not confiscatory and would not deprive complainant of its property without due process of law, and does not deny it the equal protection of the law; that said Act is not in violation of Section 10 of Article 1 of the Constitution of the United States, and that it does not deprive complainant of the liberty of contract.

XII. Denies upon information and belief that the rates fixed by chapter 125 of the Laws of 1906 referred to in the bill of complaint are unreasonable and unjust and cannot be continued in effect without irreparable injury to the complainant for the destruction of its property rights and interests.

XIII. Alleges upon information and belief that the prices fixed by said chapter 125 of the Laws of 1906 gives a fair and reasonable return to complainant on the capital invested in its business.

XIV. Alleges upon information and belief that all and every of the matters in said complainant's bill of complaint are matters which may be tried and determined at law and with respect to which the said complainant is not entitled to any relief in a court of equity.

Wherefore, said defendant asks that the bill of complaint herein be dismissed with costs.

Dated, Albany, N. Y., February 5th, 1919.

CHARLES D. NEWTON,
Attorney General of the State of New York, Defendant,
Office and P. O. Address, Capitol, Albany, N. Y.

WILBER W. CHAMBERS,
Deputy Attorney General, Solicitor for said Defendant, Charles D. Newton, Attorney General of the State of New York,
Office and P. O. Address, Capitol, Albany, N. Y.

UNITED STATES OF AMERICA,
State of New York, City and County of Albany, ss:

Charles D. Newton, being duly sworn, deposes and says: I am the Attorney General of the State of New York and one of the defendants herein. I have read the foregoing answer and know the contents thereof and the same is true.

CHARLES D. NEWTON.

Sworn to before me this 7th day of February, 1919.
W. M. THOMAS,
Notary Public.

Answer of defendants Whitney et al., constituting the Public Service Commission.

District Court of the United States, Southern District of New York. In Equity.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
against
CHARLES D. NEWTON, as Attorney General of the State of New York; EDWARD SWANN, as District Attorney of the County of New York, State of New York, and TRAVIS H. WHITNEY, CHARLES S. HERVEY and FREDERICK J. H. KRACKE, constituting the Public Service Commission of the State of New York, First District, Defendants.

The above named defendants, Travis H. Whitney, Charles S. Hervey and Frederick J. H. Kracke, constituting the Public Service Commission of the State of New York, First District, by Godfrey Goldmark, their Solicitor, hereby jointly and severally answer the bill of complaint herein as follows:

I.

Answering Paragraph I of said bill of complaint these defendants admit that the complainant is a corporation incorporated for the purpose of manufacturing and selling gas in the City and County of New York under and by virtue of a Consolidation agreement executed on September 29, 1884, by and on behalf of the several corporations to such purpose and effect as set forth in the said paragraph of said bill of complaint. These defendants admit that said agreement was filed in the office of the Secretary of State of the State of New York and with the Clerk of New York County; and that the complainant was organized as a corporation thereunder for the period and with the right to extend its corporate existence as set forth in said paragraph in said bill of complaint.

II.

Answering Paragraph II of said bill of complaint these defendants are without knowledge as to whether by virtue of said Consolidation Agreement the complainant became the owner of various mains, pipes and conductors therefor in the streets, highways and public places in the City and County of New York; and as to whether it further became the owner of all mains, pipes and conductors theretofore laid in said streets by the said predecessor companies; and as to whether the complainant also thereby became the owner of large and extensive works for the manufacture and distribution of gas which had been erected by the said various predecessor companies and these defendants therefore deny said allegations. These defend-

ants admit that the complainant has ever since been engaged in the business of manufacturing and selling gas to the inhabitants of the City and County of New York and The City of New York; and has laid additional mains, pipes and conductors therein. These defendants are without knowledge as to whether by virtue of said Consolidation Agreement and otherwise the complainant became the owner of various franchises or consents obtained by its predecessor companies authorizing them to lay, maintain and operate mains, pipes and conductors in the streets, highways and public places in the City and County of New York, and these defendants therefore deny said allegations.

III.

Answering the allegations of Paragraph X of said bill of complaint these defendants deny the allegations thereof and allege that the decision of the Supreme Court of the United States was that the complainant's bill of complaint filed on May 1, 1906, should be dismissed without prejudice. These defendants admit that prior to said decision said Supreme Court rendered an opinion reported in 212 U. S. Reports at page 19. These defendants deny that the contents of said opinion are correctly set forth in said Paragraph X of the bill of complaint herein. These defendants further allege that what a court decides is determined by its judgment and mandate and that the only determination by the said United States Supreme Court was its judgment and mandate that the bill of complaint filed by the complainant on May 1, 1906 should be dismissed without prejudice.

IV.

Answering the allegations of Paragraph XII of said bill of complaint these defendants deny that the value of the complainant's property devoted to its gas business as of December 31, 1905, as found by the United States Circuit Court in the said former suit to review the Eigthy-Cent Gas Law as modified by the said decision of the Supreme Court of the United States was the sum of $55,612,435 and these defendants deny that the said United States Supreme Court made any finding whatever as to the value of the complainant's property devoted to its gas business as of December 31, 1905, or as of any other date whatever. These defendants deny that since December 31, 1905, or since the said decision of the Supreme Court of the United States, there has been added to the property devoted to the company's gas business property which has cost the complainant as much as $14,085,265. These defendants deny that the total value under normal conditions of the company's property presently devoted to its gas business is as much as $69,697,700. These defendants are without knowledge as to

whether the cost of reproducing said property at the present time will greatly exceed that amount and therefore they deny said allegation. These defendants deny that the complainant is possessed of any going value or of any other intangible assets of any value. These defendants deny that any assets of complainant were omitted from the valuation of complainant's property in the said former suit in the United States Circuit Court, but these defendants allege that the decree of the United States Circuit Court finding the value of complainant's property at the time of the commencement of the former suit was reversed by the United States Supreme Court. The defendants deny that there now exists in the company's earnings under the eighty-cent rate a deficiency of $12,000,000 below a six per cent. return, or any deficiency whatsoever. These defendants allege that the complainant during said period has secured reimbursement for the entire expense of manufacturing and distributing gas and earned more than six per cent. per annum on the fair value of property used in such manufacture and distribution. During the greater portion of this period, as defendants are informed and believe, the complainant has paid to its stockholders dividends of six or seven per cent. a year, and has in addition accumulated and invested profits aggregating not less than $22,000,000, besides setting aside reserves for the protection of its property investment and the net income therefrom aggregating not less than $15,000,000. Such undistributed profits and reserves do not include the large reserves and surpluses of electrical companies controlled by the complainant. These defendants deny that the said sum of $12,000,000 or any sum should be added to the value of the complainant's tangible property as going value.

V.

Answering the allegations of Paragraph XIII of said bill of complaint these defendants are without knowledge as to whether during the year ending October 31, 1918, the gross operating revenues from the complainant's gas business amounted to $15,764,288.11 and as to whether the cost of manufacturing and distributing said gas together with taxes and other expenses amounted to $15,665,046.46 and as to whether the net income from the business operation of the complainant was only $99,241.65, and therefore these defendants deny said allegations. These defendants deny that a net income of $99,241.65 is less than one-fourth of one per cent. of the value of the complainant's investment.

These defendants deny that the present value of the complainant's investment based upon said eighty-cent gas case or upon any fair valuation is as much as $69,697,700, whether ex-

clusive of alleged going value and other intangible property, or otherwise. These defendants deny that the principal sum upon which a return of six per cent. was earned by the complainant in 1918 was as little as $1,654,027; and they deny that the complainant is deprived of any return by the said act of 1906 upon the fair value of the property of the plaintiff employed in the public service of manufacturing and distributing gas. These defendants are without knowledge as to whether the net earnings of $99,241.65 for the year ending October 31, 1918, amounted to only 55 100s of one per cent. per thousand cubic feet of gas sold and therefore these defendants deny said allegation. These defendants deny each and all the other allegations contained in said Paragraph XIII of said bill of complaint.

VI.

Answering the allegations of Paragraph XIV of said bill of complaint these defendants deny the allegations of said paragraph, except that these defendants admit that during the existence of the state of war between the United States and the Imperial German Government the cost of the manufacture and distribution of gas increased owing to abnormal and temporary conditions existing during said period.

VII.

Answering the allegations of Paragraph XV of said bill of complaint these defendants deny the allegations thereof.

VIII.

Answering the allegations of Paragraph XVI of said bill of complaint these defendants deny that the rate of eighty cents per thousand cubic feet of gas has during the past year, that is to say, the year 1918, either practically or otherwise deprived the complainant of any return upon the reasonable value of its property devoted to the manufacture and distribution of gas. They deny that at any time since the rate went into effect has the complainant failed to have any fair return upon said property; they deny that said act is or at any time was in violation of Section 10 of Article I of the Constitution of the United States or in violation of the Fourteenth Amendment of the said Constitution for the reasons stated in said bill of complaint or for any other reason. These defendants allege that said chapter 125 of the Laws of 1906 is in all respects a valid and subsisting statute and governs and fixes the maximum rates and charges which complainant is entitled to demand and receive for the service therein provided for.

These defendants further allege that the gross operating

revenues received by complainant in the year 1918 and its net income for said year are not fair or lawful criteria of the return heretofore earned and hereafter to be earned by complainant under chapter 125 of the Laws of 1906 of the State of New York. These defendants further allege that the costs entering into the manufacture and distribution of gas in the year 1918 were abnormally and temporarily high owing to the existence of a state of war between the United States and the Imperial German Government. Upon information and belief these defendants further allege that heretofore and before the commencement of this suit complainant earned a reasonable and fair average return upon the fair value of its property employed in the public service, and will hereafter earn such fair return on said value under the said act of 1906. These defendants further allege that the hypothetical cost of reproducing complainant's property in the year 1918 during the existence of said state of war is not the fair value of the complainant's property and that to base rates for gas upon a valuation representing a hypothetical cost of reproduction in the year 1918 or during the said war period would be unlawful and manifestly unfair and unreasonable to the public and would result in allowing complainant to take advantage of a public calamity as a means of increasing its rates above what would be a fair return upon the fair value of its property employed in the public service.

These defendants further allege that said chapter 125 of the Laws of 1906 provides that the illuminating gas to be furnished by complainant thereunder shall have an illuminating power of not less than twenty-two sperm candles of six to a pound burning at the rate of one hundred and twenty grains of spermaceti per hour, tested at a distance of not less than one mile from the distributing holder by a burner consuming five cubic feet of gas per hour and these defendants allege that the complainant has persistently, continuously, knowingly and willfully failed to abide by and comply with the foregoing provision of said chapter 125 of the Laws of 1906 in that it has persistently, continuously, knowingly and wilfully failed during the year 1918 to furnish gas having illuminating power of not less than twenty-two sperm candles of six to a pound, burning at the rate of one hundred and twenty grains of spermaceti per hour, tested as provided in the said act, and has furnished gas throughout the year 1918 which when tested as provided by the said act had on the average an illuminating power much less than twenty-two sperm candles to a pound, burning at the rate of one hundred and twenty-two grains of spermaceti. As a result of said failure of complainant to comply with the statute consumers received gas of a lesser heating and lighting value than they were entitled to under said act and were obliged to and did pay more for gas necessarily consumed by

them than they would have paid had complainant complied with said Act of 1906, and the gas actually consumed was inferior to twenty-two candle power gas. These defendants allege that the failure of the complainant herein to furnish gas of a candle power provided for by the said Act of 1906 was occasioned by the fact that the complainant voluntarily and without compulsion of law, pursuant to contracts made by it, extracted from the gas after its manufacture and before its distribution to consumers much of the enriching oil contained therein for the purpose of manufacturing a product known as toluol, with the result that the gas, when tested as provided by said statute, had a candle power much less than twenty-two candle power. These defendants allege that despite this fact complainant during said year 1918 continued to exact and collect from consumers the rate of eighty cents per thousand cubic feet without giving to said consumers any credit or allowance whatever for the loss in candle power occasioned by complainant's voluntary act, and that complainant has included in its operating expenses of 1918 the cost of manufacturing twenty-two candle power gas. These defendants allege that said acts of complainant were illegal and in fraud of the rights of consumers under said statute of 1906 and that because of said acts of complainant, under said statute complainant does not come into this court of equity with clean hands and in no event is entitled to charge to operating expenses of 1918 the cost of manufacturing twenty-two candle power gas or to any assistance or relief from this court against the provisions of the Act of 1906 (which complainant has violated as aforesaid in 1918) because of conditions, costs or returns resulting from its operations during the said year 1918.

IX.

Answering the allegations of Paragraph XVIII of said bill of complaint these defendants are without knowledge of the allegations of fact in said paragraph, therefore these defendants deny the same.

X.

Answering the allegations of Paragraph XX of said bill of complaint that the complaint can only obtain relief in the court of equity, these defendants deny the said allegation and deny that the interposition of the power of the court of equity is necessary in any manner or at all to protect the alleged rights of the complainant or complainant's property herein against any action which can be taken by these defendants under and pursuant to the statutes of the State of New York.

Wherefore these defendants pray that the bill of complaint herein be dismissed with costs.

GODFREY GOLDMARK,
Solicitor for defendant, Travis H. Whitney, Charles S. Hervey, and Frederick J. H. Kracke, constituting the Public Service Commission of the State of New York, First District.
No. 49 Lafayette Street, Borough of Manhattan, New York City.
GODFREY GOLDMARK,
Counsel.

Answer of Defendant Swann.

District Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
against
CHARLES D. NEWTON, as Attorney General of the State of New York, and others, Defendants.

The District Attorney of the County of New York, State of New York, By William P. Burr, his solicitor herein, alleges:

First: Your orator denies that he has any knowledge or information sufficient to form a belief as to each and every allegation contained in the paragraphs of the Bill of Complaint marked and numbered "I," "II," "XIII," "XIV," "XV," "XVI" and "XVIII," except that your orator admits that the complainant is a corporation organized under the laws of the State of New York, and is engaged in the business of manufacturing and distributing illuminating gas for public and private consumption.

Second: Upon information and belief, your orator denies each and every allegation in the paragraph of the bill of complaint marked and numbered "X" except that your orator admits that the complainant herein is entitled to a fair return upon a fair value of its property actually engaged in public service, proper deductions and allowances being made in any event for depreciation in said property. Your orator alleges that the cost of reproducing said property is not a fair reasonable or true guide to the determining of the fair value of said property. Your orator further admits in connection with the allegations of paragraph marked and numbered "X" that complainant's bill of complaint in the former action referred to in said paragraph was dismissed by the Supreme Court of the United States without prejudice and until a fair trial and an experiment could be had with the rates provided by chapters 736 and 737 of the

Laws of 1905 and chapter 125 of the Laws of 1906 of the State of New York. Your orator alleges that the complainant herein has been experimenting with the rates provided by said statutes for a period of over ten years and that therefore said complainant has been guilty of delay and laches in asserting that it has not received an adequate return from the said rates since their establishment by statute and in this respect has slept on its rights if it had any in the premises for an unreasonable length of time. That furthermore, your orator alleges that the Supreme Court of the United States did not decide in its said decision that the complainant was at all times entitled to six per cent. upon the fair value of its property actually engaged in the public service and further avers that there is no fixed rate of return that a public service corporation may at all times, and under all circumstances, be entitled to receive, but that the true determination thereof depends in each case, upon the peculiar circumstances of that case.

Your orator further alleges and avers, upon information and belief that the complainant is the owner of record and beneficial owner of numerous and large parcels of land engaged in the public service as well as land not so engaged. That the complainant is not entitled to include in the value of the rate base claimed by it in the paragraph of the bill of complaint herein marked and numbered "XII" any value as to land not actually engaged in the public service, nor any buildings and property not so engaged. That morever, the land actually engaged in the public service has an excessively high market value, due to community and social demands alone, and it is upon these values that the complainant asks a return. That your orator prays that your honorable Court will deduct from any claimed market value of the land in question, this excess of value and give to it only such value as it is fair and reasonably worth regarded as land devoted to public service.

Third: Upon information and belief, your orator denies so much of the allegation contained in Paragraph marked and numbered "XX" of the bill of complaint herein which alleges that complainant may obtain relief only in a court of equity.

Fourth: Upon information and belief, your orator denies that the operation of said chapter 125 of the Laws of 1906 would cause the complainant to suffer irreparable loss or the destruction of its property rights for the seasons set forth in said bill of complaint, and said defendant denies that there is no remedy except in equity to test adequately and completely the said act.

Fifth: Upon information and belief, your orator avers that the rate or rates provided for in said chapter 125 of the Laws of 1906 are reasonable and not confiscatory and would not deprive complainant of its property without due process of law, and does not deny it the equal protection of the law; that said Act

is not in violation of Section 10 of Article I of the Constitution of the United States, and that it does not deprive complainant of the liberty of contract.

Sixth: Upon information and belief, your orator denies that the rates fixed by chapter 125 of the Laws of 1906 referred to in the bill of complaint are unreasonable and unjust and cannot be continued in effect without irreparable injury to the complainant or the destruction or denial of its property rights and interests or any of them.

Seventh: Upon information and belief, your orator alleges that the prices fixed by said chapter 125 of the Laws of 1906 gives a fair and reasonable return to complainant on the fair value of its property used in the public service.

Eighth: Upon information and belief, your orator alleges that all and every of the matters in said complainant's bill of complaint are matters which may be tried and determined at law or by petition directed to the Legislature of the State of New York and with respect to which the said complainant is not entitled to any relief in a court of equity.

Ninth: Upon information and belief, your orator avers that the said complainant has not, during the past two years, furnished continuously and with a fair degree of uniformity to its consumers gas, of a candle power having the standard of illumination provided by the statute of the State of New York known as 22 candle power and that the gas so furnished by said complainant was for substantial periods of time during the two years named deficient in heat units, wherein and whereby the said complainant has in effect compelled its public and private consumers to pay a rate for heat and illuminating power greater than that fixed by the said statute, which the complainant now attacks as non-compensatory.

Wherefore, your orator prays that the said bill of complaint be dismissed with costs.

WILLIAM P. BURR,
Corporation Counsel, Solicitor for Edward Swann, District Attorney of New York County, State of New York.
Office and Post Office Address: Municipal Building, Borough of Manhattan, New York City.

UNITED STATES DISTRICT COURT,
Southern District of New York, ss.:

Edward Swann, being duly sworn, deposes and says that he is District Attorney of the County of New York, State of New York, and is one of the defendants named in the Bill of Complaint in this action; that he has read the foregoing answer

and knows the contents thereof; that the same is true of his own knowledge, except those allegations made upon information and belief, and as to them, he believes it to be true.

EDWARD SWANN.

Sworn to before me this 23d day of May, 1919.

HORACE W. FORBES,
Notary Public, New York Co.
New York County Clerk's No. 93.
New York County Register's No. 10006.
Commission expires March 20, 1920.

Order of Substitution.

(After Answers, Before Order, Appointing Special Master.)

District Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY, Complainant,
against
CHARLES D. NEWTON, as Attorney General of the State of New York, et al., Defendants.

Upon reading and filing the affidavit of Godfrey Goldmark, sworn to herein on May 7, 1919, and upon the annexed consent of all parties, it is

Ordered, that Lewis Nixon, constituting the Public Service Commission of the State of New York, for the first district be and hereby is substituted as party defendant herein in place instead of the defendants, Travis H. Whitney, Charles E. Hervey and Frederick J. K. Kracke, constituting the Public Service Commission of the State of New York for the first district and that this suit be continued against said Nixon as party defendant herein without prejudice to the proceedings already had herein and that the answer of the said Travis H. Whitney, Charles E. Hervey and Frederick J. K. Kracke heretofore filed herein shall stand as the answer of the said Lewis Nixon, constituting the Public Service Commission of the State of New York, for the first district.

Dated May 15, 1919.

J. M. MAYER,
U. S. D. C.

Order Appointing Special Master.

In Equity, 15-358.

At a Stated Term of the District Court of the United States for the Southern District of New York, in the Second Circuit, held in the Post Office Building, in the Borough of Manhattan, in the City, County and State of New York, on the 16th day of May, 1919.

Present: HON. JULIUS M. MAYER, United States District Judge.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant.

against

CHARLES D. NEWTON, as Attorney General of the State of New York, and others, Defendants.

Issue having been joined in this case upon the filing of the answers of the above named defendants to the bill of complaint herein, and the complainant having moved, upon the affidavit of John A. Garver, Esq., verified the 30th day of April, 1919, for the appointment of a Special Master herein, and it appearing that there is no objection thereto on the part of the defendants;

Now, on motion of Messrs. Shearman and Sterling, solicitors for the complainant, it is ordered:

1. That Abraham S. Gilbert, Esq., be, and he hereby is, appointed Special Master, to take all of the testimony and evidence respecting the issues herein, make all needed computations and fully find the facts; but nothing herein contained shall be construed as meaning that the Special Master's findings of fact shall be final, but only that he shall find the facts for the purpose of aiding the Court and making his recommendations. The said Master shall, before submitting to this Court his final report, prepare and serve on the solicitors for the respective parties hereto a draft of such report.

2. The said Master shall give due notice to all parties hereto and shall proceed promptly to the hearing of the testimony and evidence in this cause, and shall, so far as practicable, continue the hearing of the said cause from day to day; and, whenever deemed by him to be necessary for the prompt completion of such hearings, he shall hold two sessions in each day, until the completion of the taking of testimony and evidence.

3. The said Master shall report to this Court all the testimony and evidence received by him, together with his findings of fact and his recommendations as to the facts and the law, with diligence, it being the intent of this order that the report of the Master and exceptions thereto shall come on for hearing no later than the second Monday of October, 1919.

JULIUS M. MAYER,
United States District Judge.

Report and Opinion of Special Master.

United States District Court, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
against
CHARLES D. NEWTON, as Attorney-General of the State of New and others, Defendants.

Report of the Special Master.

To the Honorable Judges of the Said Court:

I, the undersigned, Special Master appointed by Honorable Julius M. Mayer, District Judge, by order dated the 16th day of May, 1919, "to take all of the testimony and evidence with respect to the issues herein, make all needed computations and fully find the facts, and * * * report to this Court all the testimony and evidence received by him, together with his findings of fact and his recommendations as to the facts and the law," do hereby respectfully report: that having been attended by counsel as below stated, I proceeded to take the proofs submitted by the several parties and to hear arguments thereon, the proofs so taken consisting of nineteen volumes of printed testimony, pages 1 to 15,919, which are herewith submitted and filed, together with a stipulation signed by the various solicitors of record waiving the signatures of the various witnesses to their several depositions and further waiving the filing of the original exhibits marked in evidence. As many of the exhibits consist of very large volumes of account books of the complainant and other companies, the question of filing copies of all of the original exhibits with the Court will require a further order.

There appeared before me as counsel the following:

For complainant: Messrs. William L. Ransom, Charles A. Vilas and Jacob H. Goetz;

For the defendant Newton: Hon. Wilbur W. Chambers, Deputy Attorney General of the State of New York;

For the defendant Swann: Hon. John P. O'Brien, Assistant Corporation Counsel (now Corporation Counsel) of the City of New York;

For the defendant Public Service Commission: Hon. William Haywood, Mr. John Holley Clark, Jr., and Mr. Eli Newmann.

Upon the proofs so taken, I find and report as follows:

1. The complainant Consolidated Gas Company of New York was organized in the year 1884, under and in pursuance of the provisions of chapter 367 of the Laws of 1884, entitled "An act to authorize the consolidation of manufacturing corporations."

2. The organization took place by the consolidation of six then existing gas companies, as follows:

New York Gas Light Co.	incorporated in	1823
Manhattan Gas Light Co.	"	" 1830
Metropolitan Gas Light Co.	"	" 1855
Harlem Gas Light Co.	"	" 1855
Municipal Gas Light Co.	"	" 1874
Knickerbocker Gas Light Co.	"	" 1876

3. At the time of consolidation, the six companies above described owned and used certain lands, buildings and other property, real and personal, for, and were actually engaged in, the manufacture, sale and distribution of gas in what was then the City of New York, now the Borough of Manhattan, City of New York. In addition to the property above described, the six constituent companies were possessed of, owned and were in the actual enjoyment of perpetual franchises and rights:

(1) To be corporations and to exercise the privileges and rights of corporate action;

(2) To use the streets, alleys and public places of the City of New York, for the purpose of laying street mains therein and supplying gas through said mains to the inhabitants of the city;

(3) Sundry other intangible rights.

4. By virtue of the consolidation and of the law authorizing it, the complainant company became possessed of and became the owner in fee simple of all of the real property owned by the six constituent companies and the owner of the franchises and rights then owned, possessed or enjoyed by the constituent companies and of the personal property owned by said companies.

5. The complainant company has ever since the date of consolidation (November 10, 1884) owned, possessed, used and enjoyed all of the said franchises and rights of the said constituent companies, and still does own, possess, use and enjoy the said franchises and each of them, together with additional rights and franchises from time to time acquired by it, and the said complainant company, by virtue of the said franchises and rights, has ever since said date maintained and still does maintain its mains and services in the streets, alleys and public places of the City of New York, and has supplied and still does supply gas through said mains and services to the inhabitants of the City of New York.

6. An appraisal was made during the summer of 1884 by the interested parties of the tangible property of the six constituent companies, amounting in the aggregate to $30,052,453.96. Upon revision the final total was reduced to $29,994,000.00. The value of the franchises and rights of the con-

stituent companies was then estimated at $7,781,000.00, said sum being by agreement between the companies apportioned among them in proportion to their respective sales of gas.

7. The amount of the capital and assets of the complainant on organization, excluding working capital, was made up as follows:

Real Estate	$10,332,000 00
Plant	12,175,000 00
Mains	5,217,000 00
Services	1,005,000 00
Meters	1,195,000 00
Office furniture and fixtures	70,000 00
Total	$29,994,000 00
Franchises and rights	7,781,000 00
Total	$37,775,000 00

8. The figures at which these assets were acquired by the complainant company, and upon which its books were opened, was accordingly $37,775,000.00, although the authorized capital of the company under the consolidation agreement for the purpose of taking over these constituent companies was fixed at $39,078,000.00, leaving a balance of $1,303,000.00 to provide working capital.

9. The figure of $39,078,000.00, the amount of capital authorized for the purpose of taking over the properties of these constituent companies, was upon the basis of the actual market value of the shares of the constituent companies at that time.

10. Stock of the complainant company to the aggregate of $37,775,000.00 was thereupon issued in purchase of the assets of the six constituent companies appraised as above stated, except that $2,239,000.00 was retained in the treasury of the complainant company to retire obligations of a like amount of said constituent companies which might be a lien on the property, and $15,940.00 was retained for the purpose of making sundry adjustments pursuant to agreement, the balance $35,430,060.00 being issued directly to the stockholders of the constituent companies.

11. On or about November 11, 1884, the first appraisal of the values of the properties of the several constituent companies as aforesaid made, was adjusted to cover additions to that date, and the said adjusted appraisal as then made was as follows:

Real Estate	$10,332,000.00
Plant	12,182,491.41
Mains	5,233,962.10
Services	1,034,241.41

Meters	1,231,753.98
Meter cocks and connections	11,926.53
Pipes and specials	88,398.43
Office furniture and fixtures	70,000.00
Horses, wagons and harness	1,115.00
Tools and implements	3,273.70
Gas stoves	1,256.45
Scows	.....
Franchises and rights	7,781,000.00
Total	$37,971,419.01

12. Since the organization of the complainant company, its capital stock has been increased from time to time, much of the proceeds of this additional capital stock having been used for the purchase of stock and securities of other gas and electric companies in and about the City of New York, so that at the time of the commencement of this action the complainant company owned all of the stock of the Astoria Light, Heat and Power Company, and practically all of the stock of the New Amsterdam Gas Company, the Standard Gas Light Company, New York Edison Company, United Electric Light & Power Company, and various other gas and electric companies, and also owned a majority of the stock of the New York Mutual Gas Light Company. The New Amsterdam Gas Company owns all of the stock of the East River Gas Company and of the Central Union Gas Company, and, either directly or through its ownership of the stock of the Central Union Gas Company, all of the capital stock of the Northern Union Gas Company, substantially one-half of which is owned by the Central Union Gas Company.

13. By Chapter 125 of the Laws of 1906 it was provided, among other things, "that a corporation, association, copartnership or person engaged in the business of manufacturing, furnishing or selling illuminating gas in the City of New York * * * shall not charge or receive for gas manufactured, furnished or sold in said City a sum per thousand cubic feet in excess of the following rates: (1) In the Borough of Manhattan * * * eighty cents." It was further provided in and by said statute that "the illuminating gas furnished by any such corporation, association, copartnership or person shall have an illuminating power of not less than twenty-two sperm candles of six to a pound, burning at the rate of 120 grains of spermaceti per hour, tested at a distance of not less than one mile from the distributing holder by a burner consuming five cubic feet of gas per hour, and each one hundred cubic feet of gas shall not contain more than five grains of ammonia, nor more than twenty grains of sulphur, nor more than a trace of sulphurated hydrogen. The pressure of illuminating gas in any service mains in

said city at any distance from the place of manufacture shall not be less than one inch nor more than two and one-half inches."

14. Shortly after the enactment of this statute, the complainant company instituted an action in the Circuit Court of the United States, Southern District of New York, for a decree declaring the said statute unconstitutional because confiscatory of the complainant's property. That action having resulted in favor of the complainant, was presented on appeal to the Supreme Court of the United States, which court by decision rendered January 4th, 1909, opinion filed January 12th, 1909 (212 U. S. 19), dismissed the bill in the following language:

"It may possibly be, however, that a practical experience of the effect of the acts by actual operation under them might prevent the complainant from obtaining a fair return, as already described, and in that event complainant ought to have the opportunity of again presenting its case to the court. To that end we reverse the decree, with directions to dismiss the bill without prejudice."

15. Since the decision by the United States Supreme Court (212 U. S. 19) the complainant company has continued the manufacture and sale of gas in its own plants and has purchased and received gas manufactured in the plant of the Astoria Light, Heat and Power Company, all of the stock of which company, as above stated, is owned by the complainant company, and also in the plants of the New Amsterdam, Standard and Mutual Gas Light Companies.

16. In the manufacture and distribution of gas, the complainant company established a system of exchanging gas with the other companies above described and entered into so-called agency agreements with the New Amsterdam, Standard and New York Mutual Companies and into a purchase agreement with the Astoria Light, Heat and Power Company.

17. During the year 1918, and for the first eight months of 1919, and for the twelve months ended October 31, 1919, those periods being the ones to which proof was particularly directed, two kinds of gas were manufactured in these various plants: (*a*) coal-gas, and (*b*) water-gas. The complainant company in its own plants in the Borough of Manhattan manufactured water-gas at the two stations known as Twenty-first Street and Ninety-ninth Street, and made more or less coal-gas at the two stations known as the Fourteenth and Forty-second Street stations. The Astoria Light, Heat and Power Company made coal-gas as well as water-gas. Coal-gas was made by the Astoria Company in two units which may be described as "A" and "B", each with a rated capacity of 10,000,000 cubic feet per day, and water-gas in one unit, to be designated as "C", with a rated capacity of 30,000,000 cubic feet per day. The New Amsterdam

Company, The Standard Gas Light Company and the New York Mutual Gas Light Company made and make water-gas.

18. Since January 1, 1908, the books of account of the complainant company and of all other gas companies in the City of New York have been required to be kept in accordance with the rules and regulations of the Public Service Commission of the State of New York for the First District, which commission has had jurisdiction over said companies pursuant to the provisions of the Public Service Commission Law of the State of New York (so-called), and I find that the books of the complainant company, as well as those of the Astoria Light, Heat and Power Company, have been kept in conformity with said rules and regulations and accurately set forth the facts therein contained.

19. In the manufacture of water-gas of the statutory standard of 22 candle power, there is required the use, per thousand cubic feet of gas made, of approximately 4.1 gallons of gas oil of the gravity and quality now being supplied to the gas company and in the manufacture of coal-gas approximately 1.6 gallons of such gas oil are required to raise such coal-gas to the required candle-power.

20. The average price reasonably and necessarily paid by the Consolidated Gas Company for gas oil during 1918 was 6.5 cents per gallon, and during the first eight months of 1919 was 6.9 cents per gallon. The records of the Astoria Light, Heat and Power Company would indicate that the average cost of gas oil to that company in 1918 was 6.5 cents per gallon and during the first eight months of 1919 was 6.8 cents per gallon.

21. The present price at which contracts may be made for the delivery of gas oil alongside gas manufacturing plants in the Borough of Manhattan or in Long Island City is in excess of 6.9 cents per gallon plus lighterage cost. The trend of oil prices is sharply upward.

22. In the manufacture of water-gas, there is required per thousand cubic feet of gas made approximately 35 pounds of anthracite coal of the grade of coal being supplied in recent years or its fuel equivalent, of which 35 pounds of coal, about 32.5 pounds goes into the generators, and of which about 2.5 pounds are unsuitable for use in the generators and are used under the boilers along with approximately 11.5 pounds of anthracite boiler fuel or its equivalent in water-gas tar (one gallon of such tar weighing 9 pounds and 1 pound of tar being a fuel value of about 1.7 pounds of the grade of boiler fuel now and recently supplied).

23. The price of anthracite generator fuel was $8.26 per gross ton as of October, 1919, and now is more than that sum, the exact extent of such further increase not appearing in the record.

24. The price of anthracite boiler fuel was $5.12 per gross

ton as of October, 1919, and now is more than that sum, the ex
act extent of such further increase not appearing in the record.

25. In addition to the cost of fuel, there is involved in water
gas manufacture the expense of labor handling of fuel used in
the generators and under the boilers.

26. In the manufacture of water-gas there is also required
the use of iron mass, city water and incidental minor materials
and supplies.

27. In the manufacture of water-gas there is realized as a
residual credit about .656 gallons of water-gas tar per thousand
cubic feet of gas made, which, as of October, 1919, had a market
or sale value of 4 cents per gallon. There is also realized as a
residual credit in water-gas manufacture about .0615 gallons
of drip oil per thousand cubic feet of gas made, which, in
October, 1919, had a market or sale value of 5.7 cents per
gallon.

28. The evidence adduced in this record affords no grounds
for expecting that the prices of materials or the wages paid to
labor will be reduced during 1920 or 1921 or at any time which
can now be forecast.

29. There is necessary in the manufacture of water-gas the
employment of gas-making labor, the employment of repair
labor, the use of repair material, the incurring of miscellaneous
works expense and the incurring of gas storage expenses at the
works and distributing holders.

30. During the year 1918, under the prices of materials and
labor at that time in force, the cost of water-gas manufacture
(exclusive of gas storage expense) was 42.66 cents per thou-
sand cubic feet of gas made in the plants of the Consolidated
Gas Company, and during the eight months ending August 31,
1919, the cost of water-gas manufacture (exclusive of gas
storage expense) under the prices of materials and labor at
that time in force, was 48.43 cents per thousand cubic feet of
gas made in the plants of the Consolidated Gas Company.

31. During the year 1918 under the prices of materials and
labor at that time in force, the cost of water-gas manufacture
(exclusive of gas storage expense) was 40.54 cents per thousand
cubic feet of gas made in the plants of the Astoria Light, Heat
and Power Company, and during the eight months ending
August 31, 1919, the cost of water-gas manufacture (exclusive
of gas storage expense) under the prices of materials and labor
at that time in force was 45.75 cents per thousand cubic feet of
gas made in the plants of the Astoria Light, Heat and Power
Company.

32. The average and reasonable cost of gas storage is one
cent (1c) per thousand cubic feet.

33. In the manufacture of coal gas there is required the
use of approximately 200 pounds of bituminous gas coal per

thousand cubic feet of gas made. There is also required per thousand cubic feet of gas made approximately 10 pounds of anthracite boiler coal or its fuel equivalent, and there is also required the expense of labor handling such gas coal and boiler coal.

34. The present cost to the Consolidated Gas Company and the Astoria Light, Heat and Power Company of such bituminous coal is at least $6 per gross ton, and the cost of such bituminous gas coal to the Consolidated Gas Company and the Astoria Light, Heat and Power Company as of October, 1919, was $5.90 per gross ton.

35. The cost of the bituminous gas coal used in the manufacture of coal-gas at the plants of the Astoria Light, Heat and Power Company during the year 1918, including the labor handling thereof, was, under the prices and rates of pay at that time in force, 46.25 cents per thousand cubic feet of gas made, and during the eight months ended August 31, 1919, was 55.86 cents per thousand cubic feet of gas made.

36. In the process of coal-gas manufacture there are derived per thousand cubic feet of gas made certain residuals to be credited to the cost of manufacture in quantities, and the market or sale price thereof, as of October, 1919, is as follows:

Coke and breeze for sale or use for other than coal-gas uses, 100 pounds at $6.347 per gross ton....	$.2833
Coal tar, 1.2 gallons at $.044 per gallon.....	.0528
Ammoniacal liquor (sulphate), 1.5 pounds at $.0176 per pound.....	.0264
Ammonia (absolute) .03 pounds at $.12 per pound..	.0036
Ammonia sulphate .30 pounds at $.0485 per pound..	.0146
Cyanogen .15 pounds at $.29 per pound.....	.0435
Total	$.4242

37. As a deduction from the foregoing residual credits aggregating 42.42 cents per thousand cubic feet of gas made, however, there is an expense of handling residuals including the cyanogen extraction, amounting to approximately 5 cents per thousand cubic feet of gas made, making the net proceeds from residuals, 37.42 cents per thousand cubic feet of gas made.

38. In order to enrich coal-gas so that the same shall fulfill the statutory standard of 22 candle power there is required the use of approximately 1.6 gallons of additional gas oil in the manufacture of water-gas of a higher candle-power to be mixed with such coal-gas.

39. In the course of the process of this enrichment there is derived a tar credit amounting to approximately 0.25 gallons of tar per thousand cubic feet of gas made, which had a market or sale price of 4 cents per gallon as of October, 1919.

40. In the manufacture of coal-gas there is also required the use of iron oxide, city water and incidental minor materials, and the expenses of the handling of the materials.

41. In the manufacture of coal-gas there is also required the cost and expense of gas-making labor, the cost of expense of repair labor, the cost and expense of repair material, the elements of miscellaneous works expense and the item of expenses in connection with gas storage at the works and distributing holders.

42. During the year 1918, under the prices of labor and materials at that time in force the cost of coal-gas manufacture (exclusive of gas storage expense) was 33.95 cents per thousand cubic feet of gas made in the plants of the Astoria Light, Heat and Power Company, and during the eight months ending August 31, 1919, the cost of coal-gas manufacture (exclusive of gas storage expense) under the prices of materials and labor at that time in force, was 47.31 cents per thousand cubic feet of gas made in the plants of the Astoria Light, Heat and Power Company.

43. It is impossible on the record in this case to make any finding as to the cost of making coal-gas in the plants of the complainant company at the 14th and 12d Street plants during the year 1918 or during the first eight months of the year 1919.

44. On the basis of the ratio of 22 per cent. coal-gas and 78 per cent. water-gas obtaining in the manufacture of gas supplied to the consumers of the complainant company, the average station cost of such gas, as of September 1, 1919, including the cost of gas storage, was not less than 47.09 cents per thousand cubic feet of gas made and not less than 50.63 cents per thousand cubic feet of gas sold. The average station cost of such gas at this time is not less than 50.63 cents per thousand cubic feet sold.

45. Prior to the year 1906 the officers of the complainant company concluded in good faith that the time had arrived when further extensions of gas manufacturing plants on Manhattan Island would not be permitted and it was absolutely essential that manufacturing facilities be established elsewhere. In accordance with this conclusion the complainant company caused to be organized the Astoria Light, Heat & Power Company and caused to be erected at Astoria, Long Island City, two coal-gas units and one water-gas unit above described, and the complainant company also caused a tunnel to be built from the works at Astoria to the Borough of The Bronx to convey gas to the Borough of Manhattan, which tunnel was constructed by the East River Gas Company, which had built the so-called Ravenswood tunnel prior to the acquisition of any stock interest in the East River Gas Company by the New Amsterdam Gas Company, or in the New Amsterdam Gas Company by the Con-

solidated Gas Company. The franchises of the Consolidated Gas Company did not give it any right to construct a tunnel under the East River.

46. During the year 1918, the complainant company sold to its consumers 18,029,245,000 cubic feet of gas, and during the first eight months of 1919 sold to its consumers 12,253,567,100 cubic feet of gas. The total sales of the complainant company during the year 1919 were at least 18,500,000,000 cubic feet, and during the year 1920 the sales of the complainant company will amount to at least 19,000,000,000 cubic feet.

47. In the manufacture and sale of gas, a percentage of the gas made is lost, due to condensation, differences in the temperature at the consumers' meters, slow meters, leaks and the like. I find that unaccounted for gas reasonably represents approximately 7 per cent. of the gas made and that in calculating the requirements of the complainant company, that figure should be used as a basis for computation.

48. The consumption of gas and its sale varies from time to time, depending upon the weather. The low mark of gas sales is found in the warm summer months, and the peak or maximum demand is found in the winter months. The complainant company must therefore be prepared not alone to make sufficient gas to meet a total annual demand but must be prepared to meet a maximum day's demand.

49. Upon the basis of 7 per cent. unaccounted for gas, the complainant company should have a rated daily manufacturing capacity of at least 108,500,000 cubic feet, allowing for reasonable reserve capacity.

50. At the present time the complainant company has the following plant capacities per day:

a. Twenty-first Street, 28,500,000 cubic feet;

b. Ninety-ninth Street, 5,500,000 cubic feet;

c. Fourteenth Street, 5,000,000 cubic feet;

d. Forty-second Street, 4,500,000 cubic feet, in addition to which it has available the capacity of the Astoria plant of 50,000,000 cubic feet, making a total of 93,500,000 cubic feet daily capacity.

51. If the Fourteenth and Forty-second Street Plants were discarded, it would be absolutely necessary for the complainant company to find equal plant capacity elsewhere at a cost not less than the present book cost and value of those stations.

52. In making up its present deficiency of plant capacity, the complainant company has been using 10,686,000 cubic feet of the manufacturing plant capacity of the water-gas plant of the New York Mutual Gas Light Company. Pursuant to the agency agreements, an interchange of gas takes place between the complainant and the Standard and New Amsterdam companies, as the result of which the complainant is sometimes a

debtor and sometimes a creditor company, on account of the gas so interchanged.

53. An additional 30,000,000 cubic foot water-gas unit is at present being constructed in connection with the plant of the Astoria Light, Heat and Power Company, under a contract calling for its completion on or before December 1, 1920, at an approximate expense of $1,500,000 for the additional structures, apparatus, equipment, connections and the like required for the installation and operation of such 30,000,000 cubic foot water-gas unit. The use of the 10,686,000 cubic feet of manufacturing plant capacity of the New York Mutual Company, hitherto used by the complainant company, will be discontinued upon the completion and operation of the new water-gas unit at Astoria. I have, therefore, excluded from consideration, in determining the investment in manufacturing plant, used in the manufacture of gas sold by the complainant company, the $2,198,377.35 representing the investment in the portion of the plant of the New York Mutual Company hitherto used in manufacturing gas sold by the Consolidated Company, and have included, in lieu thereof, one-half of the additional investment required for the new water-gas unit in course of construction at the Astoria plant.

54. I find that it is absolutely essential, for the purpose of meeting the demands of its consumers, that the complainant company use all of the four plants on Manhattan Island above described as well as all of the plant facility now at Astoria and at least half of the additional facility now under construction, or in place thereof other plant capacity, and I also find that in connection with the use of the Astoria plant, the complainant company must use the so-called Astoria tunnel for the purpose of conveying gas from Astoria to Manhattan.

55. In arriving at the cost of taxes, there must be included not alone the manufacturing plants of Manhattan Island, but also the present manufacturing plant at Astoria and the tunnel conveying gas from Astoria to Manhattan, and in addition thereto, taxes on one-half of the additional plant facilities now under construction at Astoria or other plant facility to that same extent.

56. I find that the average cost of taxes applicable to the manufacture and distribution of one thousand cubic feet of gas, whether that figure be arrived at by excluding the Fourteenth and Forty-second Street plants but including other plant capacity in place thereof to an equal amount and including all of the present Astoria plant, and the Astoria tunnel and one-half of the additional unit now under construction at Astoria, or by including the Fourteenth and Forty-second Street plants and all of the existing Astoria plant, together with the tunnel and one-half of the additional facilities, or by excluding the

Fourteenth and Forty-second Street plants, but including the present Astoria plant and all the additional 30,000,000 cubic foot plant, to be not less than seven and one-half cents (7½¢) per thousand cubic feet of gas sold.

57. There must also be added to the cost of making and distributing gas the cost of maintaining the Astoria Tunnel. I fix this cost at not less than one cent (1¢) per 1,000 cubic feet of gas sold.

58. I find the average cost of renewals and replacements which must be added to the cost of gas to be three cents (3¢) per thousand cubic feet of gas sold.

59. In addition to the items heretofore referred to, there must be added to the cost of gas to the consumer various items entering into the cost of distribution, including distribution superintendence, supplies and expenses, meter and installation work, work on consumers' premises, repairs on street mains, repairs on services, repairs on meters, repairs on buildings (branches, street departments, shops, etc.), repairs on tools (street departments, shops, etc.), repairs on gas appliances, public street lighting, commercial expenses, salaries, general office, supplies and expenses general office, legal expense, claims and arrears, insurance, vacation and sickness, contribution to employees' mutual aid society, superannuation, stable expense, automobile expense, claims for damages, uncollectible bills, interest on consumers' deposits, use of distributing system and miscellaneous general expenses, and I find that if the operation of the Astoria plant be combined with the general operations of the plaintiff company that the cost of all of these items will not be less than twenty cents (20¢) per thousand cubic feet of gas sold.

60. Included in the cost of distribution are various items, such as commercial expenses, having to do with the sale and rental of appliances and the like, resulting in miscellaneous operating revenue to the complainant company. In 1918 the miscellaneous operating revenue represented 7.28 cents per thousand cubic feet; for the first eight months of 1919 this same revenue showed 6.62 cents per thousand cubic feet. The reasonable average would appear to be 6.95 cents. I, therefore, find that 6.95 cents per thousand cubic feet should be credited against the cost of making and distributing gas on account of miscellaneous revenue.

61. I find the total cost of the gas delivered to consumers by the Consolidated Gas Company to be at least 82.13 cents per thousand cubic feet, from which should be deducted 6.95 cents for miscellaneous revenue, making the net cost of gas delivered to the consumer 75.18 cents per thousand cubic feet.

62. I find the average selling price of gas, including that sold to the City of New York at 75 cents per thousand cubic feet,

to be 79.91 cents per thousand cubic feet, showing a net profit to the complainant company, as of September, 1919, of not more than 4.73 cents per thousand cubic feet of gas sold.

63. Exclusive of working capital, I find the fair value of the property used and needed in the manufacture, transmission and distribution of the quantity of gas required by the consumers of the complainant company, as of January 1, 1919, and since that date, and on which it is entitled to have a fair return computed, to be at least the sum of $71,054,351.14, arrived at as follows:

Property other than particularly specified	$38,675,393.99
Franchises	7,781,000.00
Astoria property	17,169,342.57
Astoria tunnel	5,178,614.58
One-half the cost of the new 30,000,000 unit	2,250,000.00
Total	$71,054,351.14

64. That the complainant Consolidated Gas Company owns and uses in its gas business, and did so own and use on December 31, 1918, and ever since, the following parcels of real property within the Borough of Manhattan and The Bronx, in the City of New York, used and useful in its gas business, and included in the first item of the property referred to in finding No. 63 above:

Station	Block No.	Lot No.
Hester St. Office	239	1 and 5
General Office Bldg	870	47 and 60
14th St. Holder Station	989	1
14th St. Station	982	13
" "	988	1
" "	991	1 and 47
E. 17th St. Yard	985	7, 19, 20
21st St. Station	951	35
" "	952	7, 29, 30 and 35
" "	953	1
" "	978	5 and 6
" "	979	1 and 27
" "	987	37
42nd St. Station	1089	1
" "	1090	23
" "	1107	7
44th St. Holder Station	1092	7 in part
" " "	1093	9 " "
57th St. Office Bldg	1028	38
E. 63rd St. Holder Station	1457	6
W. 65th St. Yard	1177	21

Station	Block No.	Lot No.
W. 65th St. Holder Station.....	1157	1
99th St. Works.....	1670	1
" "	1692	1
E. 111th St. Yard.....	1683	18
E. 111th St. Holder Station.....	1682	8 and 11
E. 111th St. Garage and Storage Yard	1704	5
E. 111th St. Dock Property.....	1712	2
3rd Ave. Commercial Office.....	1642	32 and 33
W. 132nd St. Holder Station.....	1998	50-3-4-5-6
" " "	1999	1
E. 132nd St. Tunnel Head and Storage Property.....	2583	360
W. 159th St. Meter Shop.....	2108	23
Kingsbridge Holder Station.....	3236	1

65. That the values upon the above-stated parcels of land (unimproved) owned by the complainant company, by the taxing authorities of the City and State of New York, as of October 1, 1918, for the levying of taxes for the year 1919, were respectively as follows:

Block No.	Lot No.	Value.
239	1	$90,000
239	5	37,000
870	47	21,000
870	60	410,000
989	1	155,000
982	13	326,000
988	1	390,000
991	1	180,000
991	47	56,000
985	7	178,000
985	19	6,500
985	20	6,500
951	35	53,000
952	7	292,000
952	29	11,000
952	30	24,000
952	35	35,500
953	1	526,000
978	5	17,000
978	6	365,000
979	1	430,000
979	27	6,000
987	37	105,000
1089	1	900,000

Block No.	Lot No.	Value.
1090	23	82,500
1107	7	375,000
1092	7	231,000
1093	9	228,775
1028	38	400,000
1457	6	145,000
1177	21	265,000
1157	1	815,000
1670	1	630,000
1692	1	245,000
1683	18	80,000
1682	8	10,000
1682	11	445,000
1704	5	355,000
1712	2	52,500
1642	32 33	48,000
1998	50	22,000
1998	53	7,000
1998	54	7,000
1998	55	7,000
1998	56	7,000
1999	1	165,000
2583	360	67,000
2108	23	21,000
3236	1	200,000
		$9,531,275

In addition to the foregoing, the Astoria Light, Heat and Power Company owns and uses, and did own and use on December 31, 1918, and ever since, land in the Borough of Queens, of which the value (unimproved) determined and assessed by the tax authorities of the City and State of New York, as of October 1, 1918, for the levying of taxes for the year 1919, was $2,438,910, making a total of $11,970,185 of assessed value of land (unimproved).

66. That the values stated in finding No. 65 represented the opinion of the respective Deputy Tax Commissioners as to the amounts of money for which such parcels would sell under ordinary circumstances, if wholly unimproved; that such values were assessed and determined on that basis, and do in my judgment represent at least the sums for which such parcels would so sell under such circumstances.

67. The plant, machinery and equipment used in the gas business of the complainant company have been and are maintained in excellent operating condition; proper repairs, re-

newals and replacements have been made; and the same are now in as high a state of efficiency as if new.

68. I find that the present cost of reproducing the property described in finding No. 63 above is largely in excess of the sum found by me; and I further find that the present value of the property described in finding No. 63, if based upon the reproduction cost less depreciation, would be in excess of the said sum of $71,054,351.14.

69. I find that the complainant company is entitled to include, in the amount upon which it is entitled to a fair return, the sum of $3,800,000 for working capital.

70. I find the total amount on which the complainant company is entitled to have a fair return computed, including working capital, to be $74,854,351.14. On the basis of a daily plant capacity of 108,500,000 cubic feet and 18,500,000 cubic feet of sales, the sum of $74,854,351.14 is slightly in excess of $4.00 per thousand cubic feet, and on the basis of 19,000,000,000 cubic feet, a few cents less than $4.00 per thousand cubic feet. I find that $4.00 per thousand cubic feet of gas sold fairly represents the actual investment in property used in the manufacture, transmission and distribution of the gas sold by the complainant company, and such investment may, for the purposes of this case, be taken to be at least that sum.

71. During the twelve months ended December 31, 1918, the eight months ended August 31, 1919, and the twelve months ended October 31, 1919, the operating revenues of the gas business of the complainant company were not sufficient to pay the reasonable and necessary costs of the manufacture, transmission and distribution of gas and provide a reasonable return upon the value of the property owned and used by the complainant in the manufacture, transmission and distribution of the gas sold by it to its consumers.

72. On the basis of my finding of a net profit of not more than 4.73 cents per thousand cubic feet of gas sold and approximately 19,000,000,000 cubic feet of sales for the year 1920, the complainant company's return, if any, will be not more than $898,700, representing no more than 1.2 per cent. upon the fair value of the property used and needed as hereinbefore found, or amounting to a fair and reasonable return upon no more than $11,233,750 of the fair value of the property used and needed as hereinbefore found.

73. The reasonable and proper rate of return upon the capital invested in the plants, distributing system, properties and business of the complainant company I find to be not less than eight (8) per cent. per annum, amounting to $5,988,348.09, calculated upon the fair value of the property used and needed as hereinbefore found.

74. I find that the complainant company has complied with

the provisions of Chapter 125 of the Laws of 1906 with reference to candle power and the requirements of law regarding pressure.

75. Under the construction which the courts of the State of New York have placed upon the provisions of Section 72 of the Public Service Commissions Law of the State of New York (*People ex rel. Municipal Gas Company* v. *Public Commission* 224 N. Y. 156), the Public Service Commission of the State of New York for the First District, which otherwise would have plenary power over the rates of the complainant Consolidated Gas Company, has been given no power of jurisdiction to fix, or to authorize the complainant to charge, a rate in excess of the 80-cent rate fixed by Chapter 125 of the Laws of 1906, the said Section 72 of the Public Service Commissions Law providing that the Commission may not fix or authorize a rate for gas in excess of such rate as may have been fixed by statute.

76. Various matters comprised within the issues referred to me by the order of May 16, 1919, I have discussed in greater detail in a separate opinion which is herewith submitted and made a part of this report. It is my intention that the facts, and the conclusions regarding the law, set forth for reasons of convenience in that separate document, shall be deemed a part hereof, with the same force and effect as though they had been physically incorporated in this report.

77. I RECOMMEND that it be adjudged and decreed that Chapter 125 of the Laws of 1906, in so far as it provides that the complainant Consolidated Gas Company of New York shall not charge or receive for gas manufactured, furnished or sold by it, a sum per thousand cubic feet, in excess of a rate of eighty cents per thousand cubic feet, is illegal and void, because in contravention of Section 10 of Article 1 of the Constitution of the United States and of the Fourteenth Amendment to the said Constitution, and that the complainant Consolidated Gas Company of New York have the other and further relief against the defendants in this suit which is asked for in the complaint herein.

All of which is respectfully submitted.

ABRAHAM S. GILBERT,
Special Master.

Dated, New York, May 5, 1920.

United States District Court, Southern District of New York.
In Equity, 15-358.

CONSOLIDATED GAS COMPANY OF NEW YORK, Plaintiff,
against
CHARLES D. NEWTON, as Attorney General of the State of New York; EDWARD SWANN, as District Attorney of the County of New York, State of New York; and LEWIS NIXON, constituting the Public Service Commission of the State of New York, for the First District, Defendants.

Opinion of the Special Master.

This action was instituted by the complainant against the defendants the Attorney General of the State of New York, the District Attorney of New York County, and the Public Service Commission for the First District, for a decree declaring Chapter 125 of the Laws of 1906 unconstitutional because confiscatory of the complainant's property; the basis of this claim being that the maximum selling price of eighty cents per thousand cubic feet allowed by statute does not net the complainant a fair return upon the value of the property necessarily used in the manufacture and distribution of gas to consumers in the Borough of Manhattan, City of New York.

The action was referred to me as Special Master by order of Honorable Julius M. Mayer, dated the 16th day of May, 1919. The order appointing me provided that I should proceed promptly to the hearing of the testimony and continue the hearing of the cause from day to day, and if necessary for the prompt completion of such hearings, that I hold two sessions each day until the completion of the taking of testimony and evidence. I was orally directed, however, by the District Judge to allow the defendants until the 15th day of July, 1919, to prepare for trial. Since that date, I have sat almost continuously with the exception of such occasions as I have deemed it proper to grant short adjournments to counsel and on two occasions when I found it necessary to be away from the city. A great mass of testimony has been taken. The record consists of approximately 16,000 printed pages, excluding exhibits which have not yet been printed. It is important, therefore, that I give the Court reviewing my report a statement of the basis upon which my report has been made, and the manner in which I reached the conclusions set forth.

In accordance with the requirements of the order of May 16, 1919, and the accustomed practice in the trial of rate suits in equity in this district, I submitted to counsel for all of the parties, on April 19, 1920, a preliminary draft of my report and of this opinion as well. On April 28, 1920, I received from all counsel informal written statements embodying their sugges-

tions or criticisms regarding the matters covered by this preliminary draft. Thereupon I have proceeded to complete and file my report and opinion in its present and final form, which alone is to be taken as completely embodying my findings and conclusions.

Organization and Capitalization of Complainant.

The complainant company was organized in 1884 by the consolidation of six gas companies then doing business in the City of New York. These gas companies had been in business for many years. One of them had been organized as far back as 1823. The property owned and used by these companies in 1884 had been purchased from time to time, covering a period of fifty or sixty years or more prior to the time of consolidation. Some of the property purchased was waterfront property at a time when the highwater mark of the East River was much further west on Manhattan Island than it is to-day, so that considerable of the land which was in occupation by the gas companies in 1884 was made land, as the result of filling in and reclaiming land under water then part of the East River. These various gas companies had from time to time obtained franchises of various character from the State and from the City for the laying of pipes and mains and for the doing of business; they were unrestricted as to price and conducted their business without regulation by the State. The stock of the various companies therefore became valuable property, and in the summer of 1884 the quoted value of the stock of these six companies in the aggregate was $39,078,000.

Whether Chapter 367 of the Laws of 1884 was the result of a scheme to combine and consolidate the various gas companies of the City of New York, or whether the scheme to consolidate these companies was conceived as a result of the passage of Chapter 367 of the Laws of 1884 I am unable to say. The probability is that Chapter 367 of the Laws of 1884 came into existence because of the scheme to consolidate the various gas companies.

However that may be, Chapter 367 of the Laws of 1884 was passed on May 28, 1884, and quite soon thereafter the plan to consolidate the various gas companies in the City of New York was instituted. Originally, it was planned to combine seven companies, the six referred to by me in my report, and a seventh, the New York Mutual Gas Light Company. The total capitalization originally proposed was $45,000,000. It was found, however, that the New York Mutual Gas Light Company, incorporated in 1866, was prevented from entering into the merger because of a prohibition in its charter. That company therefore was dropped from the plan, the amount which had been figured as applicable to that company deducted, and the

balance of the capital, $39,078,000, was figured as the authorized capital of the company upon the basis of the actual market value of the shares of the constituent companies at that time.

The statute (Chapter 367 of the Laws of 1884) provided that: "the amount of capital, the number of shares of the stock into which the same is to be divided (*which capital shall not be larger in amount than the fair aggregate value of the property, franchises and rights of the several companies thus to be consolidated*, but which may be increased in accordance with the provisions of the Act entitled * * *) and the manner of distributing such capital among such consolidated corporations or the holders of the stock of the same, with such particulars as they may deem necessary,"

be stated in the agreement and certificate of incorporation.

The statute further provided that the agreement should not be deemed an agreement of the corporations so proposing to consolidate until after it had been submitted to the stockholders of each corporation. Thereupon a committee was appointed for the purpose of appraising the various plants and agreeing upon their value. This committee employed Thomas F. Rowland, an engineer experienced in the construction of buildings and apparatus of this character, to appraise the plants. It is quite clear to my mind that Rowland's appraisal did not include the land and did not embrace any examination of meters, services or other property on consumers' premises. However that may be, all of the parties agreed upon certain valuations for real estate, plant, etc., of the various companies aggregating $29,994,000 and they also agreed upon a value for franchies and rights of $7,781,000, making a total of $37,775,000 of stock to be issued, allowing a balance of $1,303,000 for working capital.

Stock to the aggregate of $37,775,000 was thereupon issued in purchase of the assets of the six constituent companies appraised as above stated, except that $2,329,000 was retained in the treasury of the complainant company to retire obligations of a like amount of said constituent companies which might be a lien on the property, and $15,940 was retained for the purpose of making sundry adjustments pursuant to agreement; the balance of $35,430,000 being issued directly to the shareholders of the constituent companies.

Value in 1884 *of Property Acquired by Complainant.*

It is impossible for anyone to say at this time that the property, assets and franchises transferred by the constituent companies to the complainant company were not of the "fair aggregate value" fixed at that time.

Counsel for the defendants, particularly the learned Attorney-General, attempted to show the exact cost of these various properties to the constituent companies. I think they abso-

lutely failed in that attempt. There is no evidence that the constituent companies paid anything for the franchise rights. I am inclined to believe that the actual cost of the various tangible properties to the constituent companies was less than their appraised value in 1884; but as I have already stated, there is no evidence in this case which would justify a finding that the values fixed for the purpose of consolidation in 1884 did not represent the fair value, at that time, of the property acquired by the complainant. However that may be, the complainant company did pay, in the par value of its stock, the price agreed on, and for thirty-six years that agreement fixing that price has remained undisturbed.

In 1885 the Legislature of the State of New York through the Senate appointed a committee to investigate this consolidation. The committee employed counsel and an accountant, received a great mass of testimony and evidence, and made two reports, one being signed by John I. Gilbert, chairman of the Committee, the other being signed by Thomas W. Robinson and Michael C. Murphy—Senator Gilbert evidently believed the complainant company to have been over-capitalized; the majority of the Committee, however, appear to have reached a contrary conclusion. But no action was ever instituted by the State challenging the incorporation of the complainant company; no effort was ever made by the State in any proper proceeding to prove that the property transferred to the complainant company on consolidation was not worth the price agreed on, and the public, through thirty-six years, has been led to believe, by inactivity on the part of the State, that the stock issued by the complainant company on organization was in compliance with Chapter 367 of the Laws of 1884, and was for property "the fair aggregate value" of which was the amount paid in par value stock therefor.

The complainant company began business on the 10th or 11th of November, 1884. In April, 1900, the capital stock was increased to $54,595,200. In July of that year it was further increased to $80,000,000. Today it has an authorized capital stock of $125,000,000, of which there is issued and outstanding $100,000,000. It has also issued and outstanding 7 per cent. convertible bonds to the extent of $25,000,000. In the years between 1884 and 1918 the complainant company acquired by purchase practically all of the stock of the New York Edison Company, doing an electric light and power business; the United Electric Light & Power Company, doing a similar business; the Brush Electric Company; the New Amsterdam Gas Company; the Standard Gas Light Company, and other gas and electric companies. The New Amsterdam Company, practically all of the stock of which is owned by the Consolidated Company, in turn owns all the stock of the East River Gas

Company and of the Central Union Gas Company. The Central Union and the New Amsterdam Companies each own about one-half of the stock of the Northern Union Gas Company. The complainant company also owns more than 56 per cent. of the stock of the New York Mutual Gas Light Company. It also owns all of the stock of the Astoria Light, Heat and Power Company, to which I shall presently refer. Through its stock control it has a monopoly of the gas and electric business in the Borough of Manhattan, City of New York.

Should Earnings of the Electric Lighting Business Offset Losses of the Gas Business?

Counsel for the defendants strenuously insist that in determining whether the complainant company earned or could earn a fair return upon its necessary capital, I should take into consideration the fact that the complainant company monopolizes the gas and electric business in this territory, and the profits earned by the complainant company by reason thereof, offsetting any losses there may be in the gas business by profits from the electric business. Counsel stressed the point that the testimony showed that the electric lighting companies owned by the complainant company were very active in the exploitation of electricity and their efforts to induce consumers to use electricity, rather than gas, and the extension of the use of electricity, the complainant company was put to it to keep up the demand for gas, through the development of new industrial and domestic uses for gas, to take the place of uses for which electricity has proved more popular and suitable. Of course the situation would have been precisely the same in this respect if entirely separate interests controlled the electric business. The two classes of business, however, are closely allied and I appreciate a certain force in the argument presented to me. But the Courts of this state and the defendant Commission alike have declared the law to be that a public utility is not required to sell one of its products at a loss because it sells another product at a reasonable rate or at a profit. Even if the same company sells both gas and electricity, which is not the fact as to the complainant, it is constitutionally entitled to charge reasonable rates for each, and electric consumers could not be made to bear the burdens of a confiscatory rate for gas (*Municipal Gas Company* v. *Pub. Serv. Comm.*, 225 N. Y. 89). The rate for electricity within the City of New York is regulated by the defendant Public Service Commission for the First District, and it is presumed reasonable unless and until the contrary has been shown in a proper proceeding (*Municipal Gas Company* v. *Public Service Commission*, *supra*). Under the authorities, the complainant company appears entitled to have the rate chargeable by it for gas kept adequate, without regard to

the rate charged for electricity by companies in which it owns stock control. Moreover, the Legislature has seen fit to provide separate regulation of gas and electric lighting companies. It has not regulated a lighting and heating company as such. It has itself fixed a certain price for gas supplied in the Borough om Manhattan, and has said that the price of electricity shall be regulated by the Public Service Commission. I therefore ruled throughout the trial that I would not take proof as to profits derived from the electric business as bearing upon the losses sustained in the gas business.

Manufacturing Plants Used in the Complainant's Gas Business.

Upon organization the complainant came into possession of a number of gas manufacturing plants, some making coal-gas and some water-gas. Of these plants only four remain; the 14th and 42nd Street coal-gas plants and the 21st and 99th Street water-gas plants. The total maximum daily gas capacity of these four plants is 43,500,000 cubic feet a day, but for some years past the 14th and 42nd Street coal-gas plants have not been regularly operated. They have been fired up every winter in anticipation of a possible demand which would require an output at those plants, but except for the winters of 1919 and 1920, very little gas has been made in these two plants for some years, so that the complainant company for some years past has only manufactured in its own plants a maximum of approximately 34,000,000 cubic feet. In 1918, out of a total of over 18,000,000,000 cubic feet of gas sold, it only made in its own plants about 8,000,000,000 cubic feet, the balance of the gas coming from the New York Mutual, the New Amsterdam and Astoria companies. During the first eight months of 1919, out of a total of over 12,000,000,000 cubic feet sold, a little over 4,000,000,000 feet was made by the complainant company, the rest coming from other sources.

The New Amsterdam Company has a manufacturing plant at Ravenswood, Long Island, and brings its gas over to Manhattan by way of a tunnel called the "Ravenswood Tunnel" which was built by the East River Gas Company, all of the stock of which is owned by the New Amsterdam Company, practically all of the stock of the latter company, as I have already stated, being owned by the Consolidated Company. The New York Mutual and Standard Gas Companies make Gas on Manhattan Island.

Some time prior to 1906, the complainant company caused to be organized the Astoria Light, Heat and Power Company, and that company purchased a large tract of land at Astoria, Long Island City, and constructed from time to time coal and water-gas units until it had in operation for some years prior to 1918:

Unit A, coal-gas, with a rated daily capacity of	10,000,000 cu. ft.
Unit B, coal-gas, with a rated daily capacity of	10,000,000 " "
Unit C, water-gas plant, which originally had a daily capacity of 20,000,000 cubic feet and was subsequently increased to	30,000,000 " "

Contracts Under Which Gas is Procured from Other Companies.

The Consolidated Company apparently caused or procured the East River Gas Company to build a tunnel known as the Astoria Tunnel from Astoria to a point in the Borough of The Bronx, in order to convey the gas made by the Astoria Company across the East River and thence to Manhattan. For some years prior to 1918 the complainant company had the problem of keeping all of these plants working. The complainant company entered into what is called "agency agreements" with the Standard, the New York Mutual and the New Amsterdam, pursuant to which there was an exchange of gas between the Consolidated Company and its subsidiaries on the basis of station cost plus ten per cent.; and the complainant company also made an agreement with the Astoria Company, pursuant to which it agreed to take all of the output of the Astoria Company at station cost, plus taxes, insurance, administration and other expenses, and 7 per cent. return on property investment.

Subsequent to the original arrangement with the New York Mutual Company that agreement was amended so that for several years past in addition to cost plus ten per cent., the Mutual Company has been paid by the Consolidated Company a return on investment, on the theory that the Consolidated Company actually used a certain part of the plant capacity of the Mutual Company.

Of course, all these agreements made by the complainant company with its subsidiary companies are practically agreements made with itself and must be very closely scrutinized. So far as the agreements between the complainant company and the New Amsterdam, Standard and Mutual Companies, which provided for a cost plus ten per cent. basis, there can be no criticism. That was unquestionably a fair basis. Nor is the amended Mutual agreement to be criticized. A rather different situation is presented as to the Astoria Company. That company is operated under the direct control of the complainant company, virtually as a "manufacturing department" of the complainant, to adopt the phrase of Mr. Maltbie, who testified for the defendants. During 1918 and 1919 gas production at Astoria was curtailed somewhat by the United States Government's use of a part of the coal-gas plant for carbon manufacture for war purposes in 1918, the recurring inability to obtain

adequate deliveries of bituminous coal, and, during the summer periods of "off-peak" demand for gas, the adjustment of Astoria production so as not to interfere too much with the continued operation of the Manhattan plants and the permanency of their labor forces. The operating executives of the complainant testified that it was more economical and highly advisable to keep the 99th Street and 21st Street plants going to a lessened capacity during mid-summer, even though this involved curtailing the possible production of gas at Astoria.

The general method pursued by the complainant company in the operation of its business and in the keeping of its books has been to charge as an operating expense the cost of the gas which it obtained from other companies. This cost from the Astoria Company included a percentage of cost of maintaining the various tunnels and return on investment thereon, and the books, records and accounts of the complainant company present, therefore, a most complicated system requiring close analysis and allowing, as accounts of this kind usually do, a variety of conclusions drawn by various experts representing the different interests.

Plant Capacity Required for Complainant's Consumers.

In reaching a conclusion in this case, therefore, I have not attempted to follow the paths of any of the parties to the action. The outstanding feature of the case to me has been that this complainant company is under obligation to sell a twenty-two candle power gas in the quantities demanded by its consumers.

The complainant company must be prepared to make between 18 billion and 19 billion cubic feet of gas this year and must be prepared to make and send out probably 100,000,000 cubic feet of gas in one day before the end of this year. To make this quantity of gas requires plant capacity. The complainant company now has a plant capacity on Manhattan Island of 43,500,000 cubic feet daily. It has a plant capacity in Astoria of 50,000,000 cubic feet and is now constructing an additional 30,000,000 cubic feet water-gas plant so that it will have in all 123,000,000 cubic feet maximum daily capacity or about 23,000,000 cubic feet more than it will probably need on any one day in 1920 or in 1921. But the witnesses all agree that in extending a gas plant the reserve capacity must be somewhere between 20 per cent. and 25 per cent. and that when this reserve capacity gets down to about 5 per cent., additional capacity must be provided. It is expected that this additional gas plant in Astoria will be in operation in time to meet the winter demand of 1920, so that at that time all of the gas required by the complainant company can be made at Astoria and at the four manufacturing plants on Manhattan Island.

The 14th and 42nd Street Plants.

Counsel for the defendants insisted that the 14th and 42nd Street plants were not used or useful and should be disregarded in all my calculations.

I agree with the complainant company that it probably could not have secured a permit to build any more manufacturing plants on Manhattan Island, and was therefore compelled to go to Astoria.

In my opinion it was not bad judgment for the Consolidated Gas Company to retain the 14th and 42nd Street coal-gas plants. The evidence submitted would tend to show that there is a real danger of a shortage in gas oil, in which event the complainant company will find itself compelled to look to the coal-gas plants, and if these plants had been discarded, other plant capacity would have been required.

Proof of Required Quantities of Materials and Labor.

The methods of making coal and water-gas, the kind of material necessary, the character of labor required, and the character of residuals produced were conceded. Quantities and prices, however, were disputed.

Bearing on this question, I had the testimony of Mr. Woods, an expert engineer with many years' practical experience, and also of Mr. Little. I also had before me the operating ledgers and other books of account of the complainant company and of the Astoria Company for the year 1918, and for the first eight or ten months of the year 1919. In connection with these books, testimony was adduced as to the manner in which they were kept. From time to time great quantities of vouchers of various kinds were brought into Court. The books themselves are kept in conformity with the rules and regulations of the Public Service Commission for the First District, which has regulatory powers over the plaintiff company under the Public Service Law of the State of New York. I personally visited the Astoria Works, accompanied by counsel for the various parties. I was convinced that these books accurately reflected the operations of the complainant company and the Astoria Company. They are kept in infinite detail.

Counsel for the defendants strenuously objected to my receiving these books in evidence. The defendants were afforded the fullest opportunity of not alone examining these books in advance of their being offered, but after they were offered, the defendants were afforded the opportunity of examining all the underlying data, vouchers, reports, receipts and other papers that might bear upon the accuracy of these books. Taken in conjunction with the testimony of Mr. Woods and of Mr. Little, as to the character and quantities of materials and labor neces-

sarily used in the manufacture of gas, I think that the record shows beyond question just what, in the actual operation of gas plants, is required for the making of gas and the cost thereof.

Cost of Manufacture in 1918 *and Eight Months of* 1919.

In my findings I have set out in detail the various elements entering into the manufacture of gas and it is unnecessary for me to refer to them again in this opinion. Suffice it to say that the books of the complainant company show that, excluding gas storage expense, the actual cost of making water-gas at its 21st and 99th Street plants in the year 1918, was 42.66 cents per thousand cubic feet of gas made, and for the eight months of 1919, it was 48.43 cents. The Astoria records show that for the year ending December 31, 1918, the actual cost of making water-gas in Astoria was 40.54 cents and for the eight months ending in August, 1919, was 45.75 cents. Mr. Woods figured the cost of water-gas in the month of October, 1919, at 47.07 cents. In some instances this cost of materials was somewhat higher than the *average* cost to the companies as appearing from the books of 1918 and 1919, and in some instances he estimated a somewhat larger quantity than actual operations showed was used. In this connection, it should be noted that the quantity used varies in the different plants, and sometimes in the same plant on different days. Having in mind that the plaintiff must prove its case beyond any reasonable doubt, I reached the conclusion that the safest basis upon which to work was the actual result of operations in the Astoria plant for the eight months ending August 31, 1919, that plant being a most efficient manufacturing plant with modern labor-saving devices. The Astoria books of account, manufacturing records and supporting data for this period were placed in evidence by the defendants as a part of their case, and were tabulated and analyzed by the defendants' accounts, as well as by the representatives of the complainant in rebuttal. On a basis of the prices and costs during that period of 1919, the actual cost of making coal-gas, excluding storage, was 47.31 cents. The actual cost of making water-gas was 45.75 cents. On the basis of the quantities produced the cost per thousand cubic feet of mixed gas was 46.40 cent per thousand cubic feet, and on the basis of 78 per cent. water-gas and 22 per cent. coal-gas prevailing in the gas sales of the complainant as of September, 1919, the cost was at least 46.09 cents per thousand cubic feet of gas made.

Increases in Manufacturing Cost Since Early 1919.

To my mind it is impossible for anyone seriously to dispute that figure. I have therefore found as a fact that the cost of making gas at this time is not less than 46.09 cents plus one

cent storage expense, making 47.09 cents for gas made. That was the average cost for eight months in 1919. Since that time the price of oil has gone up. The price of coal has gone up. The price of labor is constantly going up. Any figure beyond the figure shown by actual operation for the first eight months of 1919 would be speculative, and I have avoided basing any conclusions on fragmentary or incomplete data of operations. It is beyond the shadow of a doubt that the materials and labor going into the manufacture of coal and water-gas today, making allowance for the residuals produced, cost the complainant company, no matter how or where the gas is made, at least 47.09 cents per thousand cubic feet.

"Gas Unaccounted For."

It is conceded by everybody in the case that a certain percentage of gas is lost; that is, it disappears by reason of leaks, slow meters, condensation, variations of temperature, and the like. The question as to the amount of this "unaccounted for gas", as it is called, was sharply litigated. After listening to the testimony given by Mr. Woods and by the defendants' expert, Mr. Little, and after analyzing the various reports of the various companies and the experiences of various companies, and the explanations of Mr. Woods and the statements of Mr. Little with reference to it in this and other cases, I am satisfied that 7 per cent. of the gas made must be figured as unaccounted for gas. Upon this basis, therefore, the gas sold represents 93 per cent. of the gas made. The gas made costing 47.09 cents per thousand cubic feet therefore represents, in my judgment, beyond any doubt, at least 50.63 cents per thousand cubic feet for gas sold.

Complainant's Claim as to Present Cost of Manufacture.

Counsel for the complainant asks me to find the present station cost of gas sold to be 56.06 cents, on the basis of 22 per cent. coal-gas and 78 per cent. water-gas prevailing in the gas sales of the complainant company as of October, 1919. He reaches this figure on the basis of what he claims to be proof in the record as to the present cost of oil, coal and other materials. I am inclined to believe that he accurately states the figures upon the basis of actual prices paid in October, 1919, and upon some proof in the record as to contracts since made for oil. I have refused to find, as requested by him, because as indicated, I prefer to base my decision upon actual results of operation, with the additional statement that the cost today is substantially higher than it was during the first eight months of 1919.

Suggestions of Substitute Methods of Manufacture.

Counsel for the defendant Swann offered the testimony of Mr. Little for the purpose of indicating how the complainant

might make gas by the coke oven and chamber oven processes at a less cost than the present method of manufacture. I was much impressed with Mr. Little and the testimony given by him, but I do not think that this company can be required to invest, at this time of high prices and of labor difficulties, a very large sum of money in these methods of gas manufacture, with the possibility staring it in the face of not being able to sell the greatly increased quantities of coke which would be produced as a result of such methods of manufacture; for it is conceded that unless Mr. Little's judgment is right as to the ability to sell coke, his plans must be disregarded.

In this connection it should also be noted that Mr. Little, on cross-examination, admitted that he would not advise the complainant's executives to undertake the installation of a plant of this character now or under the conditions prevailing for several years. Moreover, for several years the complainant company and the Astoria Company have experienced great difficulty in obtaining the quantity of bituminous coal required for their present mode of making coal-gas. They have received only about sixty per cent. of the quantity desired and contracted for by them. During the past winter, and at other times previously, the generation of coal-gas in the Astoria plant has had to be curtailed because of the inability to obtain coal. Under such circumstances, the introduction of a mode of manufacture depending on greatly increased quantities of coal in proportion to the gas produced for sale, has not commended itself to the complainant's executives.

Renewals and Replacements.

We then have the question of renewals and replacements. Counsel for the complainant asks me to find that this item of expense is at least three and a half cents (3 1-2c) per thousand cubic feet. He contends that the record shows that the actual cost is about that figure. His contention, however, is based upon the renewals and replacements of the Manhattan plants. I think a better result will appear when the Manhattan and Astoria plants are combined; and in my judgment, as I have indicated in my findings, three cents per thousand cubic feet will fairly cover the item of renewals and replacements.

Expense of Maintaining Transmission Facilities.

Another item which must be added to the cost of gas sold is the expense of maintaining the Astoria Tunnel. As I have already pointed out the complainant company was practically forced to go to Long Island City to make its gas, and is therefore compelled to use a tunnel to convey gas to Manhattan. That tunnel is under water, requires a great deal of care and atten-

tion and constant repairs, with the necessary materials and labor. Based on the charge made by the Astoria Company for the year 1919, the cost of maintaining the tunnel is one cent per thousand cubic feet sold.

Present Cost of Taxes Levied by Public Authority.

There must also be added to the cost of making and distributing gas certain taxes assessed against the complainant company. I have reported the tax item to be 7½ cents per thousand cubic feet. I reached that figure in the following manner:

The record shows for the year 1918 taxes assessed against the complainant company were as follows:

New York State Gross Earnings tax	$78,473.86
New York City Special Franchise tax	384,297.90
New York City Real Estate of Corporations tax	155,122.20
New York City Real Estate tax	462,171.55
New York City Personal tax	23,300.00
United States Capital stock tax	24,807.38

For the same year the Astoria Company had the following taxes assessed against it:

Real Estate	345,953 30
Gross Earnings	31,516 10
Personal	11,157 41
Capital Stock	8,541 50
Excess Dividends over 4%	6,000 00
Special Franchise	321 73
Federal Income	192,594 01

If the plants be consolidated the gross earnings tax of the Astoria Company would be eliminated. Likewise the tax on excess dividends over 4 per cent. Likewise Federal Income tax. The capital stock tax of the complainant will remain the same, leaving the following items to be taken as taxes assessed for the year 1918 on the entire property:

New York State Gross Earnings tax	$78,473 86
New York City Special Franchise tax	384,297 90
New York City Real Estate of Corporations tax	155,122 20
New York City Real Estate tax on Manhattan properties	462,171 55
New York City Real Estate tax on Astoria property	345,953 30
New York City Personal tax, Manhattan	23,300 00
New York City Personal tax, Astoria property	11,157 41
Astoria Special franchise	321 73
U. S. Capital Stock tax	24,807 38
To this must be added the tax on Astoria tunnel of	123,022 59
Making a total of taxes assessed, taking the year 1918 as the basis, of	$1,608,627 92

This divided by 19,000,000,000 cubic feet, which I take to be the maximum for 1920, gives 8.5 cents per thousand cubic feet. But counsel for the defendants contend, and I think correctly, that the item of $155,122.20 real estate of corporations tax must be disregarded. Mr. Sangster points out, that as against the item of $345,953.30 tax on real estate of Astoria for 1918, only $264,700.15 was paid, and in 1919 only $307,819.36 was paid. The record shows that franchise taxes are usually reduced. On the other hand, if the complainant be permitted to earn a fair return some tax items may be increased. On the same basis of 19,000,000,000 cubic feet for 1920, 7.5 cents per thousand cubic feet, gives me $1,425,000 as the tax item instead of $1,608,627.92, making a difference of $183,627.92.

It is impossible, I think, to figure the tax item any closer than I have done. I am convinced that in reaching the figure of 7.5 cents I have fixed a figure which, in all probability, experience will show to be the exact cost,—at any rate, so close to it as to be fair to both the public and the complainant company.

Cost of Distribution.

"Cost of distribution," which must be added, covers many items under the Uniform System of Accounts, not all of which are strictly distribution costs. The complainant company does a very large business in the sale and renting of gas appliances, and in that connection much publicity and promotion work must be done. The cost of doing this work is included in the cost of distribution. One of the items in the list of items making up cost of distribution (salaries, general office) led to considerable argument on the hearing before me. The complainant company, as I have already indicated, is not alone a manufacturing but a holding company. It owns capital stock and securities of a number of other companies. It is contended on the part of the defendants that at least one-third of the general officers' salaries should be deducted because these gentlemen devote their time not alone to the affairs of this particular company but to the affairs of the companies the stock of which is owned by the complainant company. The officers of the complainant company on the other hand insists that they take no active part in the operation of any of the other companies; that the other companies have their own executive officers; that if this company sold all of the securities which it owns of other companies their work would be precisely the same and the expense of running the company would be precisely the same. I was not able to agree entirely with the contention of counsel for the complainant in this regard nor am I able to agree entirely with the claim of the defendants that this and some other items should be reduced one-third. There are some items, too, like legal expense and entertainment expense, that are disputed.

It is difficult to know just where to draw the line. The entire cost of distribution in 1918 was 19.78 cents per thousand cubic feet of gas sold; for the first eight months of 1919, 2.10 cents; for the twelve months ended October 31, 1919, 22.09 cents.

Complainant's Claim as to Present Cost of Distribution.

Counsel for the complainant company urges that I find the distribution cost, as of October, 1919, and the present time, to be not less than 23.30 cents per thousand cubic feet of gas sold. Messrs. Carter and Woods, while on the stand as witnesses for the complainant late in the trial before me, gave testimony and presented computations by which they reached the conclusion that under present rates of pay and the present prices of materials and supplies, the distribution cost of 21.10 cents in early 1919 has become at least 23.30 cents. It is of course true that the Distribution Department has enjoyed no immunity from the effects of the mounting costs of labor and material, and I am inclined to believe that these witnesses accurately stated a ratio or extent of increase in costs which has taken place in this department since 1918 and early 1919. Clerk hire has gone up; stationery costs more; salaries of other employees have gone up, and on the whole, I believe, if fair allowance be made for all of the items in dispute, that in the business of this complainant company all of the items included under the head of distribution cost cannot possibly be kept below twenty cents per thousand cubic feet, and in reaching my figures, I have taken that figure as the cost of distribution. I have refused to find as requested by counsel for the complainant because, as indicated, I prefer to base by decision upon actual results of carrying on the business during periods for which complete figures are before me, with the additional statement that the cost today is substantially higher than it was in 1918 or the first eight months of 1919.

Deduction for Miscellaneous Operating Revenue.

As against the various items making up the cost of distribution totaling 20 cents, there must be a credit arising out of miscellaneous operating revenue, such as rent from gas appliances, profit on the sale of gas appliances, and other items which in 1918 aggregated 7.28 cents per thousand cubic feet and for the first eight months of 1919 showed 6.62 cents. I have taken an average of 6.95 cents, as warranted by all the evidence.

Compliance With the 22 Candle-power Statute.

Upon the hearing before me the contention was made by the defendants that the complainant company had violated the

provisions of Chapter 125, Laws of 1906, as to candle power and as to the pressure.

The statute under consideration requires the complainant to furnish to its consumers gas of an illuminating power of not less than twenty-two sperm candles of six to a pound burning at the rate of 120 grains of spermaceti per hour tested at a distance of not less than one mile from the distributing holder by a burner consuming five cubic feet per hour; and it was claimed by the defendants that this provision of the statute was violated by the complainant in that it did not furnish the quality of gas required by the statute. In support of their contention, the defendants offered in evidence and I received, the sworn reports of city inspectors of the calculated results of observations made by them at two city testing stations, as well as certain test sheets showing the basis of their computations. This proof covered the years 1916 to 1919, inclusive. As to part of this period, namely, the time during which the United States War Department stripped the gas of the light oils, the gas furnished to consumers was concededly of less than twenty-two candle power; but as to this period, I find as a fact that the complainant company acted under compulsion in time of war, and that were it not for the action of the United States Government officials the gas would have been in conformity with the statute.

As to the balance of the time, I am satisfied that the complainant made every effort to comply with the statute. There were some days when the gas did not test up to twenty-two candle power; but this may have been caused by conditions not to be foreseen and it may have been due to the unreliability of the tests made. I am not at all satisfied that the city inspectors were in all cases correct in their observations. The gas was not tested in the manner which the statute seems to require. It is unnecessary for me to go into the details of this gas testing. Much depends on the accuracy of the vision of the testing observer. It appears to be conceded that in order to make a twenty-two candle power gas it should be made of a twenty-three and a half candle power at the works. I am satisfied that the gas made by the complainant company was always at least twenty-three and a half candle power. In this connection I was much impressed with a report made by Mr. Hine when connected with the Public Service Commission, as a result of which an order was made by the Public Service Commission on the 13th day of October, 1917. Accompanying the order of the Commission (Case No. 2235) is an opinion by Mr. Oscar S. Straus, the Chairman, in which he refers to the work done by Mr. Hine. I quote from the opinion of Mr. Straus:

"By authorization of the Commission Mr. W. F. Hine, its Chief Engineer has established testing stations throughout the city and from January to the present time (tests were made

from January 1st to August 31st), has supervised tests in these stations, as well as secured the results of tests conducted in testing stations maintained by the city under procedure agreed to. The result of these tests, down to and including August 31st, are set forth in Exhibit 1 herein."

Exhibit 1 shows that between January 1st and August 31st, 1917, at the Grand Street testing stations 87 tests were made on Branch 1; 86 on Branch 2 and 87 on Branch 3, and the average candle power as to each branch was 22 or over, the highest being 24.2 and the lowest being 19.4. At the 79th Street testing station 133 tests were made on Branch 3; 132 tests on Branch 4 and 132 tests on Branch 6, the average of all was 22.6 candle power, the highest being 24.3 and the lowest being 20.5. At 59 Walker Street, 162 tests were made which showed the highest candle power 24.9, the lowest 19.8 and the average 22.2. At all testing stations Consolidated gas was tested 819 times, the highest test showing 24.9, the lowest 19.4, and the average 22.3. I have accepted this report of Mr. Hine as being more reliable than the tests produced in evidence, and I therefore have found as a fact that the complainant company has complied with this standard requirement of the statute.

The Candle-power Standard Useless and Wasteful.

In this connection I feel called upon to say that the record in this case discloses the fact that this candle-power standard has no place on our statute books. It is agreed by everybody that the 22 candle power requirement is a useless requirement, wasting the money of this company, and of the public. In no other place is this requirement in vogue. Since electricity has come to be used as it has for illuminating purposes, gas is no longer considered an illuminant but is used for heating rather than for lighting purposes. The important quality of gas therefore is its heating power, not its illuminating power. The time has come (in fact had arrived many years ago) when this statute should be repealed and the matter left with the Public Service Commission to determine the heating quality of the gas to be furnished to consumers. It will cost less to make gas of a heating quality accepted in most jurisdictions than it does to make a 22 candle power gas, and the quicker the standard is changed the sooner will the public be able to get gas at a price less than must necessarily be charged at this time for 22 candle power standard if a reasonable return is to be allowed the complainant company.

Compliance With Pressure Requirements.

It was intimated on the hearing before me, though not alleged, that the complainant company in some manner had violated the pressure requirements of the statute. It was also in-

timated, though not alleged, that the complainant company had also violated some order of the Public Service Commission as regards pressure. No order of the Public Service Commission on this subject was produced. The only proof offered was through the witness Edgerton who attempted to testify to something he saw at the pumping stations from which he wanted to draw the inference as to conditions in the service mains. This proof I declined to take. There is no evidence in this case that the complainant company did not comply with the pressure requirements of the statute or of any order of the Public Service Commission.

The General Office Building.

Another matter which I should perhaps refer to in this opinion is the question of the general office building at 15th Street and Irving Place. That building was erected some years ago with the idea apparently of having a home for the general offices of the complainant company. It has a large auditorium where meetings are held; a restaurant on the top floor for the accommodation of employees and tenants; a central telephone exchange; rest rooms and other conveniences of that character. The cost of constructing this building compared with present conditions was very modest. The complainant company, in accounting for revenues from the building and expense of operation follows the theory of dividing the invested capital between the gas making business and non-gas business on the basis of the portion of the building occupied by other tenants and prorates the expense of operation accordingly. The defendants contend that the entire building should be taken in as invested capital and the account be credited with all of the receipts of rent from other tenants and in addition thereto insist that the space used for auditorium, restaurant and the like should be rented out so as to increase the revenues and profits of the building. I have given this matter a good deal of thought and I believe that the fairest way of handling the situation is the way it has been handled by the complainant company. The net cost to the complainant for office space is less than it would have to pay if it rented space in a building owned by some one else. I see no ground for disturbing the figures of the complainant company with regard to the 15th Street building.

The 57th Street Branch Office and Display Room.

The learned Attorney-General took exception to the 57th Street office building and offered evidence tending to show that the branch office at 57th Street could have been handled more cheaply in some other way. I believe the officers of the complainant company reached the conclusion they did in good faith and that the cost to the consumer is no more than it would

be if the company had hired office space in a building not owned by them in that neighborhood. I have declined therefore to interfere with the judgment of the officers of the complainant company in that regard.

Other Parcels Contested by Defendants.

Leaving aside for the time being the 14th and 42nd Street plants which are claimed by the defendants not to be useful in the gas business, and which I have already discussed, there are some other pieces of real estate which the defendants insist should not be continued in the fixed capital account. If these parcels were all thrown out of calculation it would make no material difference in the net result. The company officials insist that every piece or parcel still owned by the company is used and useful. There is evidence supporting the contention of the complainant company, and I decline to substitute my judgment for the judgment of the operating officials of the complainant company.

Reasonable Rate of Return.

The question of the amount of the return to which the complainant company is entitled was sharply litigated before me. The United States Supreme Court in deciding the suit brought by this company in 1906 (Willcox *v.* Consolidated Gas Co., 212 U. S. 19) rather indicated that 6 per cent. was then a fair return on the value of the property used in complainant's gas business. Since the decision of the prior suit in 1909, there has been a very radical change in business conditions. The investment market of the world is on an entirely different basis than that under consideration by the Court in 1909. Taking into consideration all of the factors which the Courts have indicated as entering into the determination of a reasonable and proper rate of return upon capital employed in supplying gas to the public, I am of opinion that this complainant company is entitled to receive a return of at least eight (8%) per cent. on the value of the property used in its gas business.

The Value of Property.

As to the value of property the Supreme Court of the United States in the prior suit of this complainant said:

"There must be a fair return upon the reasonable value of the property at the time it is being used for the public" (p. 41), and further on, on the same page, the court says:

"In order to determine the rate of return on the reasonable value of the property at the time it is being used for the public, it, of course, becomes necessary to ascertain what that value is. A very great amount of evidence was taken before the Master

upon that subject, which is included in five large volumes of the record. Valuations by expert witnesses were given as to the value of the real estate owned by the complainant and as to the value of the mains, service pipes, plants, meters, and miscellaneous personal property.

"The value of real estate and plant is to a considerable extent matter of opinion, and the same may be said of personal estate when not based on the actual costs of material and construction. Deterioration of the value of the plant, mains and pipes is also to some extent based upon opinion. All these matters make questions of value somewhat uncertain; * * *"

The Value of Franchises and Rights.

As I read the opinion of the court in that case, the Court refused to disturb the value of $7,781,000 agreed upon as representing franchises. I quote from page 47:

"We think that under the above facts the courts ought to accept the valuation of the franchises fixed and agreed upon under the Act of 1884 as conclusive at that time. The valuation was provided for in the Act, which was followed by the companies, and the agreement regarding it has been always recognized as valid, and the stock has been largely dealt in for more than twenty years (now thirty-four years) past on the basis of the validity of the valuation and of the stock issued by the company."

Unless therefore there is force in the contention made by counsel for the Public Service Commission that one of the principal franchises included in this valuation has expired and that therefore that value no longer exists, I feel bound to accept that value of $7,781,000 for franchises.

The Claimed Expiration of the "Anthracite Grant."

Counsel for the Public Service Commission points out that included among the franchises transferred to the complainant company on organization was a franchise to the Anthracite Gas Lighting and Heating Company. That company was organized under the General Manufacturing Act of 1848; it obtained from the State a perpetual franchise to operate in the City of New York, subject to obtaining a license or franchise from the City of New York to lay its mains and pipes in the city streets. By resolution of the Common Council of the City of New York adopted September 17, 1863, it was granted "the right to lay pipes and mains" for a period of fifty years. Counsel for the defendants contend that this license expired in 1913; but since then the complainant company has maintained its pipes and mains in the streets, and, so far as the record shows, has relaid pipes and mains where necessary; no action has been taken by the City of New York to disturb the complainant's

rights in the streets, and, so far as the record indicates, the City of New York still acquiesces in the complainant's rights therein. So long as the complainant is enjoying possession of the rights granted and is not disturbed, I think that for the purpose of this case the right must be deemed to be existent as if it had been extended or renewed by formal resolution, and that it must still be included as one of the franchises for which a value of $7,781,000 was fixed in 1884.

Standards of "Value of Property" in Rate Cases.

This brings me to the question of the value of the remaining property, including operating plants, mains, services and the like. The cases speak of the value of the property but fail to differentiate between one kind of value and another. Property has different kinds of value; it has a scrap value; it has a going value; it has a peculiar value to a person desiring to purchase; it has a rather different kind of value where the property is condemned for public use and the owner is compelled to build a new plant elsewhere, and in case of fire. In the case of a fire loss or a condemnation of the property for public use the owner of the property is at once confronted with the problem of replacing the plant and his loss undoubtedly is the cost of reproduction new at that time, less observed or actual depreciation. But in a case of this character that rule would be unfair to the public.

In fact, the complainant did not undertake, for the purposes of this case, to prove the present reproduction cost of its property, which it said would be in excess of $150,000,000. As to its land unimproved, it presented the testimony of the Deputy Tax Commissioners of the City of New York, the officials chosen by civil service examinations to make valuations of real property and sworn to assess such land at the full sums for which it, or similar parcels, would, under ordinary circumstances, sell, if wholly unimproved. Aside from this $11,970,185 of present value of land, the complainant contented itself on its direct case by showing the inventories and appraisals made of its properties in 1906 for the prior suit, the unit prices applied then to the properties inventoried, and the extent to which the properties then inventoried are now in existence and use by the complainant. Proof was then offered showing that the present unit prices for such materials, labor, and the like, are substantially higher than those used in 1906. On this basis, I was asked to find that the present reproduction cost of the property used in 1906 and still in use is at least as much as the sum at which it was appraised in 1906, and that property added since 1906 is now worth at least as much as it cost when erected and installed. Although I have no doubt that the present reproduction cost would be at least as much as the sum thus arrived

at, for reasons elsewhere indicated I feel on sounder and fairer ground in basing my conclusions upon the actual investment in the property, proof of which was offered in the first instance by the defendants and by the complainant in rebuttal.

Cost of Plants Per Unit of Capacity.

The various properties owned and used by the complainant company were acquired from time to time over a long period of years; a considerable part of them since 1884. For several years past the cost of labor and materials has been such that to reproduce the property of the complainant company, even with allowance for any deferred repairs and maintenance and deferred renewals and replacements of property, sometimes referred to as "observed depreciation," would cost very much more than the actual investment of the complainant company in these properties. As far back as 1886, Mr. Edgerton figures a water-gas plant worth about $150 per thousand cubic foot capacity, and a coal-gas plant at some $225 to $250. Apparently engineers through the years have figured a water-gas plant, excluding land, as worth about $150 per thousand cubic feet of daily capacity, and a coal-gas plant about twice as much. The testimony in this case was to the effect that a coal-gas plant now costs from two to three times as much as a water-gas plant. Several times as much land is required for a coal-gas plant as for a water-gas plant. Mr. Woods, the engineer of the defendant company, figuring the value of the New York Mutual plant for the purpose of inter-company adjustments long before the question came before me, fixed the value of the New York Mutual plant on Manhattan Island, including land, at $205.72½ per thousand cubic feet.

Actual Investment Not in Excess of Cost of Such Plants Before the War.

The actual investment of the Astoria Company, exclusive of working capital, is in excess of $15,460,000. Included in this is about $3,300,000, representing the original cost of the land (plus grading and filling), and of the construction of docks, wharves, and the plant railroad, leaving as the actual original cost of building the Astoria gas-plant, long prior to the world war, about $12,160,000, exclusive of land. This sum represents about $375 per thousand cubic feet of capacity for coal-gas units and about $150 per thousand cubic feet of capacity for the water-gas units. That is to say, taking 20,000,000 daily capacity for the coal-gas at $375 per thousand cubic feet, we get $7,500,000 and taking 30,000,000 cubic feet at $150 we get $4,500,000, making a total of $12,000,000 exclusive of land, the additional amount of $160,000, being for facilities which would be useful for contemplated extensions to the plant.

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The 99th and 21st Street water-gas plants, exclusive of land, represent about $172 per thousand cubic feet of capacity. The fact that one of these stations has a capacity of about 5,500,000 would tend of course to raise the average cost per unit of capacity above that of such a plant as the 30,000,000 cubic foot water-gas plant at Astoria. The investment in the 14th and 42nd Street coal-gas plants, exclusive of land, amounts to about $356 per thousand cubic feet of capacity. Compared with the Astoria coal-gas units, the relatively smaller capacity of these plants tend to a higher unit cost per unit of capacity, which, however, is more than offset by the greater investment in labor-saving equipment at the Astoria plant.

In other words, the original investment in the complainant's plants is not in excess of what such plants cost before the war. The total investment in the plant and property, including that for which stock was originally issued, but exclusive of franchise rights and working capital, after making a deduction for what is described as "jointly used property" owned by the complainant, is $38,675,393.99. On the basis of daily plant capacity of 43,000,000 cubic feet and only 10,000,000,000 cubic feet in sales that figure is slightly less than $4 a thousand cubic feet of sales. The fact is, that figured in various ways, $4 fairly represents the value of necessary manufacturing and distributing plant for one thousand cubic feet of gas sold.

Present Value of Property Owned and Used by Complainant.

I am convinced that no matter how depreciation is figured on the cost of reproducing this property, and no matter what criticism be made as to the age of the 14th and 42nd Street plants, the fact remains that those plants are going, gas-producing plants, and that the 21st Street and 99th Street plants are gas-producing plants, and based entirely upon the capacity of the plants alone, plus the extent of the street mains, services, and other property, by no possibility could this property be reproduced, less depreciation, on any theory, for $38,675,393.99, made up as follows:

Real estate (including $3,119,634.26 for General Office Building)	$10,647,062.94
Manufacturing plants and holder stations	13,119,754.76
Services	1,272,241.74
Street mains	11,027,266.24
Meters	3,719,442.12
Cocks and connections	359,322.12
Furniture and fixtures	532,437.54
Horses, wagons and harness	5,747.80
Tools and implements	149,335.26
Scows	15,821.20

Gas appliances rented	1,711,935.46
Automobiles and accessories	137,412.82
	$42,697,780.00
Less portion of General Office Building and other property owned by complainant but jointly used by others	4,022,386.01
Total	$38,675,393.99

Reasons for Rejecting "Present Reproduction Cost" and Claimed Deduction for "Theoretical Depreciation."

In arriving at the value of the property necessarily used in the gas business of the complainant company, I have rejected the testimony and suggestions of the witnesses for the defendants that I ought to take the investment in the property, less a large amount for "theoretical depreciation." Much has been said and written on this subject, and I have read with interest the matter which has been called to my attention. I cannot escape the view that a property used for the service of the public in the operation of a public utility such as a gas company, if kept in good operating condition, must, in the nature of things, be worth to the public at least the amount honestly and reasonably put into the property. Nor can I escape the conclusion that any other method of arriving at the value of the property used in the public service must tend to unfairness, either to the consuming public or to the investors in the public utility corporation.

Take the case under consideration: I have found that, starting with the value of the property as fixed and agreed upon in 1884 and the issuance of stock at par upon that basis, and adding to that sum the amounts expended from time to time in installing new apparatus and facilities in existing plants and constructing new plants and facilities, and then deducting therefrom the cost of the property withdrawn from service since 1884, there is actually and reasonably invested in property used in the gas business of the complainant no less than $71,054,351.14, exclusive of mobile or floating assets, commonly called working capital. The plant, machinery and equipment used in the gas business of the complainant company has been and is maintained in excellent operating condition; proper repairs, renewals and replacements have been made from time to time, and the same are now in as high a state of efficiency as if new. From every point of view which concerns or affects the consumers, the property for which this $71,054,351.14 was paid is rendering the same service today, and in some instances a little better service, than was contemplated or secured at

the time the money was put in. Nevertheless, counsel for the defendants insistently urge that all return must now be withheld from a large part of that investment, and the amount of investment arbitrarily reduced, merely because some of the plants or some of the property in them have been in existence for some years. The complainant company, on the other hand, would find justification in the decisions of the Courts for a contention that the value of this property must be taken as of the present time and that I must fix this value upon the expert opinion as to the cost of reproducing the property as of the present time, in which event there would arise the question whether from such reproduction cost should be deducted the amount of any observable and actual deterioration or depreciation.

"Present Reproduction Cost" Basis Unreliable and Unjust to Public or to Company.

If the complainant urged the present reproduction cost basis and I adopted that view, I would be compelled, in the first instance, to rely upon the testimony of hired experts on either side expressing views as to value—a method always unsatisfactory, at any rate to me,—and in addition thereto, I would find myself compelled to fix the value of the property at this time at a sum largely in excess of the actual investment as above found. I feel that to do this would be unfair to the public, because on such a basis the consumer would be called on to pay the complainant company a rate yielding a return upon an amount of money never put into the property by investors, but representing only an appreciation in the cost of building such a property now, due to the conditions prevailing at this time.

On the other hand, if this suit were on trial in a time of low values and low construction costs, such as prevailed for a period immediately before the Great War, it might well be that the expert testimony would have called for a conclusion that on a reproduction cost basis the property used in the complainant's gas business was in such a time worth less than the actual investment therein. Here, again, the use of such a basis of present value would lead to an unjust result, this time to the complainant company, and to the investors in the property. Their money would be still in the project, and would have been expended in good faith for new construction at prices reasonable at the time when the work was done.

I am of the opinion that in cases of this character the value of the property used must be controlled by considerations less fluctuating and more closely allied with the interests of the consumer and investor alike. The value can remain substantially stationary only if it be correlated to actual, reasonable

and honest investment. The costs of actually making and distributing the gas must, of course, fluctuate with the cost of materials and labor and the rate of return must vary with investment conditions, but if we once adopt a sound and ready means of ascertaining the value upon which the rate should yield a return, it becomes a simple matter to readjust from time to time the rate charged so as to reflect changed costs of labor and materials and any changes in the proper rate of return.

Is the Present Price Level "Abnormal"?

Counsel for the defendants strenuously urge that we are now living in abnormal times. To some extent, I assent to that proposition, but the proof indicates that what some persons still refer to as abnormal times has become to others a high, new, normal level, which will continue for a comparatively long time to come. It is impossible to forecast now any probable time when the pre-war level of wages and material costs will be restored. Where counsel for the defendants err in urging upon me the view that the price of gas should not be changed under present conditions, is in their failure to differentiate between the basis of valuing the property on which a return is to be allowed, and the basis of determining the actual cost of making and delivering the gas. Of course, as was pointed out by the learned Judge of the Court of Appeals who wrote for that Court in the *Municipal Gas Company case*, a mere temporary increase in the cost of production would not justify a destruction or suspension of the statute. No such situation is, however, presented here. As I have found, on the basis of the prices, rates of pay, and costs prevailing during the eight months beginning January 1, 1919, the cost of making and distributing gas has been such as to allow a very small, if any return, on even the actual investment; and since September 1, 1919, the cost of making and distributing gas has been increased in a number of respects so that the fair inference is that the complainant company now finds itself without any return upon the investment. The conditions found by me have existed for more than a year last past, and to a lesser degree for at least a year before that time, and will continue for at least a considerable period of time, the end of which cannot now be forecast.

The Sound Basis of Complainant's Right to Relief.

Upon such a situation and such a prospect, I think that the complainant company has shown itself, clearly and beyond all reasonable doubt, entitled to relief from the statutory limitation on its rates, but that its rate of return should be calculated, not upon the present high reproduction cost of its property, with or without the deduction of observed or actual depreciation, in whatever manner computed, but upon the actual, rea-

sonable, investment in the property devoted to the service of the complainant's consumers. Taking the years as they come and go, of high construction cost and of low construction cost, the amount honestly and actually put into a plant and system of this character, represents a sum which fairly and reasonably should be taken as representing a minimum of its value to the public for use as a public utility. The only testimony offered before me to show the expenditure which would be necessary in order to put the plant, structures, machinery and equipment in condition substantially as good as when erected or installed was that of Alten S. Miller, an engineer long familiar with these plants, now vice-president in charge of construction work for the Bartlett-Hayward Company of Baltimore. He testified that the outlay of approximately $322,000 for repairs, renewals and replacements would accomplish this result. For the reasons already reviewed, I have not considered this sum, or any other, as a proper deduction from the above-stated value of the property.

Investment in Additional Property Required for Service of Complainant's Consumers.

And it is upon this same basis that I have taken the value of the Astoria plant and Astoria tunnel. There apparently was actually invested in the construction of the Astoria plant as of December 31, 1918, $17,169,342.57 and in the tunnel $5,178,614.58.

In order to meet the requirements of the public it is necessary to have additional capacity. We must either add to the invested capital the amount that Mr. Woods figures for part of the mutual plant capacity or make allowance for the additional plant capacity at Astoria. As I have disregarded all of the plants except the Consolidated plants on Manhattan Island and the Astoria plant for the purpose of reaching a conclusion in this case, I believe that there should be added to the invested capital one-half of the expense of the new 30,000,000 foot plant at Astoria, which will cost $4,500,000, half thereof being $2,250,000. Adding these three items of the Astoria plant, Astoria tunnel and half of the additional 30,000,000 cubic feet to the item of $38,675,393.99 for property other than franchises and rights and $7,781,000 for franchises and rights, gives a figure of $71,054,351.14.

Working Capital.

In addition to these items it is conceded that the complainant is entitled to consider working capital as part of the invested capital. There was a sharp conflict between the witnesses as to the amount to be allowed for working capital. Mr. Carter, an officer of the complainant company, testified that the working capital should not be less than $1,625,000, giving his reasons

therefor. Witnesses called by the defendants testified to much [illegible] giving their reasons therefor. Mr. Little indicated that in his judgment working capital should represent about twenty cents per thousand cubic feet. For the purpose of determining the amount of working capital I have accepted Mr. Little's figure, which makes the working capital on the basis of 19,000,000,000 feet of sales as nearly as may be determined $3,800,000, making a total thereof of invested capital of $74,851,351.14 upon which the complainant is entitled to a fair return.

In Conclusion.

It has been my purpose in this opinion to give the court reviewing my findings as simple and yet as clear a picture as I can of what I conceive to be the important questions in this case. The record, as I have stated, consists of over 16,000 printed pages of testimony, in addition to which there is a very large number of exhibits, some of the exhibits consisting of large volumes of account books of the complainant and Astoria companies. To take up every argument and point of discussion presented to me in the course of this very long and arduous trial would be practically impossible within any reasonable time. I have found, as stated, that the property of the complainant company is being confiscated to a very substantial extent. Every day that this continues, assuming the correctness of my conclusions, is an injustice to this complainant company. I have, therefore, deemed it my duty rather than to spend the time necessary to write a more detailed opinion, or to state the facts in greater detail than I have in my report, to present to the court at the earliest possible moment my report and opinion in the form now prepared, to the end that such disposition may be made of this case as the Court reviewing my report and opinion may deem wise and proper.

Respectfully submitted,

ABRAHAM S. GILBERT,

Special Master.

Dated, May 5, 1920.

Exceptions to Special Master's Report.

District Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

against

CHARLES D. NEWTON, *as* Attorney-General, and Others, Defendants.

Now come the defendants, Charles D. Newton, as Attorney-General of the State of New York; Edward Swann, as District Attorney of the County of New York, and Lewis Nixon, com-

stituting the Public Service Commission of the State of New York for the First District, and except to the findings of fact and conclusions of law [illegible] Special Master herein, in the following particulars, to wit:

1. Except to finding marked "1" of the master's report which finds that:

"The complainant Consolidated Gas Company of New York was organized in the year 1884, under and in pursuance of the provisions of Chapter 367 of the Laws of 1884, entitled 'An act to authorize the consolidation of manufacturing corporations,'"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

2. The defendants except to finding marked "3" of the master's report insofar as it finds that

"At the time of the consolidation, the six companies above described were possessed of, owned and were in the actual enjoyment of perpetual franchises and rights:

(1) To be corporations and to exercise the privileges and rights of corporate action;

(2) To use the streets, alleys and public places of the City of New York, for the purpose of laying streets mains therein and supplying gas through said mains to the inhabitants of the city;

(3) Sundry other intangible rights,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

3. The defendants except to finding marked "4" of the master's report which finds that:

"By virtue of the consolidation and of the law authorizing it, the complainant company became possessed of and became the owner in fee simple of all of the real property owned by the six constituent companies and the owner of the franchises and rights then owned, possessed or enjoyed by the constituent companies and of the personal property owned by said companies," on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

4. The defendants except to the finding marked "5" of the master's report which finds that:

"The complainant company has ever since the date of consolidation (November 10, 1884), owned, possessed, used and enjoyed all of the said franchises and rights of the said constituent companies, and still does own, possess, use and enjoy the said franchises and each of them, together with additional rights and franchises from time to time acquired by it, and the

said complainant company, by virtue of the said franchises and rights, has ever since said date maintained and still does maintain its mains and services in the streets, alleys and public places of the City of New York, and has supplied and still does supply gas through said mains and services to the inhabitants of the City of New York,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

The master should have found that the said franchises, rights and privileges formerly conferred upon the constituent companies have now ceased, terminated and expired.

That the franchises granted to the Harlem Gas Light Company ceased, terminated and expired Feb. 1, 1905, and were not at the date aforesaid properly devoted by complainant to the public use.

That the franchises claimed to have been acquired by the Knickerbocker Gas Light Company through assignment from the Anthracite Gas Lighting & Heating Company, ceased, terminated and expired in 1913, and have not been since that date properly devoted by complainant to the public use.

That the franchises granted to the New York Gas Light Company and claimed by complainant to have been acquired through assignment, ceased, terminated and expired on May 12, 1853, and have not been and are not now properly devoted by complainant to the public use.

That the franchises granted to the Municipal Gas Light Company and claimed by complainant company through assignment, ceased, terminated and expired on May 5, 1868, and have not been and are not properly devoted by complainant to the public use.

That the franchises granted to the Municipal Gas Light Company and claimed by complainant company through assignment, ceased, terminated and expired in 1907, and have not been since that date properly devoted by complainant to the public use.

That the franchises granted to the Metropolitan Gas Light Company and claimed by complainant company through assignment, ceased, terminated and expired on December 22, 1888, and have not been since that date properly devoted by complainant to the public use.

5. Defendants except to finding marked "6" of the master's report which finds that:

"An appraisal was made during the summer of 1884 by the interested parties of the tangible property of the six constituent companies, amounting in the aggregate to $30,052,453.96. Upon revision the final total was reduced to $29,994,000.00. The value of the franchises and rights of the constituent companies

was then estimated at $7,781,000.00, said sum being by agreement between the companies apportioned among them in proportion to their respective sales of gas,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; whereas, the master should have found that the so-called appraisal of the property of the constituent companies was unreliable but was interested and placed a value upon the property of said constituent companies far in excess of the actual value of the property appraised and the cost of constituent companies of the several classes of property, without appreciation or depreciation, was, as shown by the books of the constituent companies, not in excess of $20,942,632.85, and that the item of $7,781,000.00 did not represent anything of value, and nothing was paid by the constituent companies for franchises and rights.

6. The defendants except to finding marked "7" of the master's report which find that:

"The amount of the capital and assets of the complainant on organization, excluding working capital, was made up as follows:

Real Estate	$10,332,000.00
Plant	12,175,000.00
Mains	5,217,000.00
Services	1,005,000.00
Meters	1,195,000.00
Office furniture and fixtures	70,000.00
Total	$29,994,000.00
Franchises and rights	7,781,000.00
Total	$37,775,000.00,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it, and the evidence does not justify said finding as a statement of the value of the assets of the complainant company in 1884, and the master should have found that the assets of complainant company on organization in 1884 did not exceed the value of $18,613,632.00.

7. The defendants except to finding marked "8" of the master's report which finds that:

"The figures at which these assets were acquired by the complainant company, and upon which its books were opened, was accordingly $37,775,000.00, although the authorized capital of the company under the consolidation agreement for the purpose of taking over these constituent companies was fixed at $39,078,000.00, leaving a balance of $1,303,000.00 to provide working capital,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

8. The defendants except to finding marked "9" of the master's report which finds that:

"The figure of $39,078,000.00, the amount of capital authorized for the purpose of taking over the properties of these constituent companies, was upon the basis of the actual market value of the shares of the constituent companies at that time,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that there is no evidence of the actual market value of the shares of the constituent companies at the time of the consolidation, and that the figure of $39,078,000.00 was not arrived at by disinterested appraisal of properties of the complainant company but purported to be arrived at upon the basis of the market value of the shares of the constituent companies at that time.

9. The defendants except to the finding marked "10" of the master's report which finds that:

"Stock of the complainant company to the aggregate of $37,775,000.00 was thereupon issued in purchase of the assets of the six constituent companies appraised as above stated, except that $2,239,000.00 was retained in the treasury of the complainant company to retire obligations of a like amount of said constituent companies which might be a lien on the property, and $15,940.00 was retained for the purpose of making sundry adjustments pursuant to agreement, the balance $35,430,060.00 being issued directly to the stockholders of the constituent companies,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

10. The defendants except to the finding marked "11" of the master's report which finds that:

"On or about November 11, 1884, the first appraisal of the values of the properties of the several constituent companies as aforesaid made, was adjusted to cover additions to that date, and the said adjusted appraisal as then made was as follows:

Real estate	$10,332,000.00
Plant	12,182,491.41
Mains	5,233,962.10
Services	1,031,241.41
Meters	1,231,753.98
Meter cocks and connections	11,926.53
Pipes and specials	88,398.43
Office furniture and fixtures	70,000.00

Horses, wagons and harness	1,115.00
Tools and implements	3,273.70
Gas stoves	1,256.45
Scows	.....
Franchises and rights	7,781,090.00
Total	$37,971,119.01,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that the evidence does not justify any finding as to the value of the assets of complainant company in 1881 based upon the so-called appraisal for the true value of complainant's property at that time, acquired from the constituent companies, did not exceed the sum of $18,613,632.00.

11. In addition to finding marked "13" set forth in the master's report, the master should have found, as requested, that by chapter 735 of the laws of 1905, which is still in effect, the Charter of Greater New York was amended so as to read as follows:

"The said commissioner of water supply, gas and electricity shall appoint inspectors who shall inspect and test the illuminating gas manufactured within the city of New York or furnished or sold to the said city or to any consumer therein. The compensation of said inspectors shall be fixed by the board of estimate and apportionment and paid by the city. The gas manufactured, furnished or sold as aforesaid shall be tested with reference to illuminating power, pressure and purity, in a suitable manner and by proper apparatus at least once each day, and shall also be tested whenever the said commissioner shall direct. The inspectors shall report under oath the result of their tests to the said Commissioner daily and the said commissioner shall file the said report in his office and the same shall be public records." (Section 522, Greater New York Charter).

12. The defendants except to the finding marked "16" of the master's report which finds that:

"In the manufacture and distribution of gas, the complainant company established a system of exchanging gas with other companies above described and entered into so-called agency agreements with the New Amsterdam, Standard and New York Mutual Companies and into a purchase agreement with the Astoria Light, Heat & Power Company,"

the ground that there is no evidence tending to support it, contrary to the evidence and the same is not supported by evidence, and the master should have found that there were agency agreements introduced in evidence in this case between complainant and the New Amsterdam, Standard and

New York Mutual Companies, nor any purchase agreement with the Astoria Light, Heat and Power Company.

13. The defendants except to so much of the finding marked "17" of the masters report which finds that:

"During the year 1918, and for the first eight months of 1919, and for the twelve months ended October 31, 1919, those periods being the ones to which proof was particularly directed,"

on the ground that the same is not in accordance with the testimony, is not supported by the testimony, and the master should have found that the year 1918 and the first eight months of 1919 and the twelve months ending October 21, 1919, were abnormal, unprecedented and unusual and no fair criterion of the cost of making and distributing gas in the city of New York and elsewhere; that the defendants' proof was directed to the year 1906, to and through the first eight months of 1919, in accordance with the issues framed by the bill of complaint herein, and the answers of the defendants; that such evidence shows the cost to complainant of making gas from 1906 to 1918, inclusive, and the return which it enjoyed in the manufacture and distribution of gas, and shows that it enjoyed a return on an average during every year from 1906 to 1918, inclusive, of over 10 per cent; that the return by complainant company in the manufacture and distribution of gas in excess of 6 per cent. exceeds the sum of $25,845,513.00 for the period of from 1906 to 1918, inclusive.

The defendants further except to the finding marked "17" of the master's report which finds that complainant made more or less coal gas at the two stations known as the Fourteenth and Forty-second streets stations, on the ground that the same is no finding at all, but, on the contrary, the master should have found that these two plants were and are out of date, inadequate, inefficient and have never been and are not now needed for the manufacture of gas, and should be excluded entirely from consideration in this case, for they are not used and useful, and that whatever gas was made at either of these plants since 1915 was only for the purpose of persuading the court to include said plants in the rate base in this case and include in the operating expenses the excessive cost of making and producing gas there, and the said plants are held by complainant only as a real estate speculation, and should have been scrapped and discontinued as far back as 1906, and that the same have since that time not been and are not now used, useful and necessary.

14. The defendants except to the finding marked "18" of the master's report, which finds that:

"Since January 1st, 1908, the books of account of the complainant company and of all other gas companies in the City of New York have been required to be kept in accordance with

the rules and regulations of the Public Service Commissions of the State of New York for the First District, which Commission has had jurisdiction over said companies pursuant to the provisions of the Public Service Commission Law of the State of New York (so-called), and I find that the books of the complainant company, as well as those of the Astoria Light, Heat & Power Company, have been kept in conformity with said rules and regulations and accurately set forth the facts therein contained,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; whereas, said master should have found that the books of complainant company, as well as the books of the Astoria Light, Heat & Power Company, are not kept in conformity with the rules and regulations of the Public Service Commission; that the books were not properly proven; that no person who made an entry therein was called as a witness; that the books were not the books of original entry and were improperly admitted in evidence; that by the admission in evidence of the books the defendants were denied the right of cross-examination; and that in admitting improperly the books of the company common law proof was dispensed with, and the defendants deprived of a fair trial.

15. The defendants except to the finding marked "19" of the master's report which finds that:

"In the manufacture of the water-gas of the statutory standard of 22 candle power, there is required the use, per thousand cubic feet of gas made, of approximately 4.1 gallons of gas oil of the gravity and quality now being supplied to the gas company and in the manufacture of coal-gas approximately 1.6 gallons of such gas oil are required to raise such coal-gas to the required candle-power,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that the number of gallons of gas oil required to make a thousand cubic feet of gas is variable and is oftentimes as low as 3.6 gallons and average not more than 3.8 gallons; that there is no set rule for the number of gallons of gas oil which is required to make a thousand cubic feet of gas; that the number of gallons depends upon the quality of the oil and the skill of the operator, together with the efficiency of the machine used; that the amount of gas oil used in making a thousand cubic feet of gas by complainant was greater in 1906, and while the previous suit of this company to test the constitutionality of the statute herein involved was in the courts, than it has ever been since with the exception of the period just prior to and during the pendency of the present suit when the records of the company again

show that it took more gas oil to make a thousand feet of gas; and that the experience of the company shows that the amount of gas oil required to be used in making gas depends upon the skill of the operator, the quality of the oil, together with the efficiency of the machine used in making the gas, and that no set rule can be laid down as to the number of gallons of oil necessary to be used for coal gas; that the years 1918 and 1919 were abnormal, unusual and unprecedented and should not be used as the basis of any calculations for oil necessary in making a thousand cubic feet of gas, but an average period should be taken which period should be from 1906 to 1917, inclusive and the two abnormal years of 1918 and 1919 excluded entirely from consideration.

16. The defendants except to the finding marked "20" of the master's report which finds that:

"The average price reasonably and necessarily paid by the Consolidated Gas Company for gas oil during 1918 was 6.5 cents per gallon, and during the first eight months of 1919 was 6.9 cents per gallon. The records of the Astoria Light, Heat and Power Company would indicate that the average cost of gas oil to that company in 1918 was 6.5 cents per gallon and during the first eight months of 1919 was 6.8 cents per gallon."

on the ground that the same is not in accordance with the evidence, and the master should have found that the evidence shows that the years 1918 and 1919 were abnormal, unusual and unprecedented; that the price paid for oil since 1918 is no criterion of what the price of oil will be in the future; that the price of oil paid by the complainant company was higher in 1918 than it was in 1919, showing that the tendency of the price of oil was downward; that other gas companies in this locality during the year 1918 and up to July 1919 were obtaining oil for less than four cents per gallon; that the complainant company has an interlocking directorate with the Standard Oil Company from which company it purchased all of its oil; that it should have obtained its oil as reasonably as did the Public Service Corporation of New Jersey and the Boston Consolidated Gas Company—namely, at a sum less than four cents per gallon.

17. The defendants except to the finding marked "21" of the master's report which finds as follows:

"The present price at which contracts may be made for the delivery of gas oil alongside gas manufacturing plants in the Borough of Manhattan or in Long Island City is in excess of 6.9 cents per gallon plus lighterage cost. The trend of oil prices is sharply upward."

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that the present

price of gas oil delivered to complainant should not exceed 4 cents per gallon; that the present prices are abnormal and unreasonable; that this case ought not to be decided upon abnormal and unusual conditions such as now exist; that the tendency of the price of oil is now downward, for the company purchased its oil in 1919 for a sum less than it did in 1918; that there is not any market price for gas oil and it is subject, as experience has shown in the past, to violent and sharp fluctuations; that complainant company buys all of its oil from one company—namely, the Standard Oil Company of New Jersey, and makes no honest effort to obtain oil from any other company or source, and has not since 1906 endeavored to obtain oil from any other company or any other source or at a price lower than that quoted by the one company with which it does business and with which it has close corporate relations.

18. The defendants except to the finding marked "22" of the master's report which finds that:

"In the manufacture of water-gas there is required per thousand cubic feet of gas made approximately 35 pounds of anthracite coal of the grade of coal being supplied in recent years or its fuel equivalent, of which 35 pounds of coal, about 32.5 pounds goes into the generators, and of which about 2.5 pounds are unsuitable for use in the generators and are used under the boilers along with approximately 11.5 pounds of anthracite boiler fuel or its equivalent in water-gas tar (one gallon of such tar weighing 9 pounds and 1 pound of tar being a fuel value of about 1.7 pounds of the grade of boiler fuel now and recently applied)."

on the ground that the same is not supported by the evidence is contrary to the evidence and has no evidence tending to support it; and the master should have found that the experience complainant for the year 1906 down to the first eight months of 1919, inclusive, shows that it does not take an amount to exceed 38 pounds of generator coal per thousand cubic feet, and that the amount of coal necessary to make a thousand cubic feet of gas depends largely upon the quality of the coal, the efficiency of the plant and the skill of the operator; and that there is no set rule that can be laid down for the number of pounds of coal necessary in making a thousand cubic feet of gas.

19. The defendants except to the finding marked "23" of the master's report which finds that:

"The price of anthracite generator fuel was $8.26 per gross ton as of October, 1919, and now is more than that sum, the exact extent of such further increase not appearing in the record."

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that there is no

competent testimony in this case to show what the price of anthracite generator fuel was per gross ton, and the price of anthracite generator fuel of $8.26 per ton was erroneously taken by the master from Witness Woods' hypothetical figure (Ex. 353 for Iden.) for making water-gas which prices were not in evidence; that October, 1919, was and is an abnormal period and that the prices at that time are no criterion of the price of generator fuel; that the master should have taken the average of the price of generator coal from 1906 to 1919, inclusive.

20. The defendants except to the finding marked "21" of the master's report which finds that:

"The price of anthracite boiler fuel was $5.12 per gross ton as of October, 1919, and now is more than that sum, the exact extent of such further increase not appearing in the record."

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that there is no competent testimony to show what was the price of boiler fuel per gross ton; that the price of boiler fuel was erroneously taken by the master from Witness Woods' hypothetical figure (Ex. 353 for Iden.) for making water-gas which prices were not in evidence; that October, 1919, was and is an abnormal period and the price at that time is no criterion of the price of boiler fuel, and that the Master should have taken the average of the price of boiler fuel from 1905 to 1918, inclusive.

21. The defendants except to the finding marked "27" of the master's report which finds that:

"In the manufacture of water-gas there is realized as a residual credit about .676 gallons of water-gas tar per thousand cubic feet of gas made, which, as of October, 1919, had a market or sale value of 4 cents per gallon. There is also realized as a residual credit in water-gas manufacture about .0615 gallons of drip oil per thousand cubic feet of gas made, which, in October, 1919, had a market or sale value of 5.7 cents per gallon."

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that there is no competent evidence of the amount of water-gas tar realized as a residual in making one thousand cubic feet of gas, nor any evidence to support the sale value per gallon of such residual, and that there was no evidence of the gallons of drip oil per thousand cubic feet of gas made nor sale price of said drip oil, and that the figures used by the master in said 27th finding are based upon the hypothetical figures in the table of Witness Woods (Defts. Ex. 353 for Iden.) which is incompetent and irrelevant and of no value whatsoever, and the master ruled upon the trial that he would not use the said exhibit 353 for identification as any basis

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for prices; and the master should have further found that 0.8 gallons of water-gas tar was realized by complainant as a residual in making a thousand cubic feet of gas; and the prices named by the master in his finding are the lowest prices received by the complainant for the past two years; that in 1918 the complainant company obtained for water-gas an average of 6.417c per gallon; that the complainant sold some water-gas tar for as much as 8.596c per gallon. and that the average price of drip oil sold by complainant company for the year 1918 was 9.719 per gallon.

22. The defendant excepts to finding marked "28" of the master's report which finds that:

"The evidence adduced in this record affords no grounds for expecting that the prices of materials or wages paid to labor will be reduced during 1920 or 1921 or at any time which can now be forecast,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and there is no evidence tending to support it; and the master should have found that there is no competent evidence in the case, of what prices for materials and wages will be in 1920 or 1921, and that what will happen concerning prices for labor and materials in the future is a mere guess and surmise and cannot be forecast by anybody and is not properly the subject of a finding in this case.

23. The defendants except to the finding marked "30" of the master's report which finds that:

"During the year 1918, under the prices of materials and labor at that time in force, the cost of water-gas manufacture (exclusive of gas storage expense) was 42.66 cents per thousand cubic feet of gas made in the plants of the Consolidated Gas Company, and during the eight months ending August 31, 1919, the cost of the water-gas manufacture (exclusive of gas storage expense) under the prices of materials and labor at that time in force, was 48.43 cents per thousand cubic feet of gas made in the plants of the Consolidated Gas Company."

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it, and the master should have found that the records of the complainant company showed that it cost to make water-gas at the 99th street station in 1918 not more than 36.396c per thousand cubic feet; that the year 1918 was abnormal, unusual and unprecedented, as was also the first eight months of 1919, and the said year of 1918 and the said period of 1919 are improper periods upon which to base any findings as to the cost of making gas; that the eight months ending August 31, 1919, and the 12 months' period ending October 31, 1919 are not proper periods under any circumstances, upon which to base a finding as to how much it cost to make gas because the said eight

months' period contains all the summer months of the year when the amount of gas manufactured is small and the cost consequently high and does not contain the fall and winter months when the amount of gas manufactured is large and the cost low.

24. The defendants except to the finding marked "31" of the master's report which finds that:

"During the year 1918 under the prices of materials and labor at that time in force, the cost of water-gas manufacture (exclusive of gas storage expense) was 40.54 cents per thousand cubic feet of gas made in the plants of the Astoria Light, Heat and Power Company, and during the eight months ending August 31, 1919, the cost of water-gas manufacture (exclusive of gas storage expense) under the prices of materials and labor at that time in force was 45.75 cents per thousand cubic feet of gas made in the plants of the Astoria Light, Heat and Power Company,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

25. The defendants except to the finding marked "32" of the master's report which finds that:

"The average and reasonable cost of gas storage is one cent (1c) per thousand cubic feet."

on the ground that the same is contrary to the evidence, is not supported by the evidence and has no evidence tending to support it; and the master should have found that there is no competent proof in the case of the cost of gas storage and the finding that he has made is no finding at all but is unnecessary and indefinite.

26. The defendants except to the finding marked "33" of the master's report which finds that:

"In the manufacture of coal gas there is required the use of approximately 200 pounds of bituminous gas coal per thousand cubic feet of gas made. There is also required per thousand cubic feet of gas made approximately 10 pounds of anthracite boiler coal or its fuel equivalent, and there is also required the expense of handling such gas coal and boiler coal,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that the number of pounds of bituminous coal required to make a thousand cubic feet of gas depends upon the quality of the coal, the skill of the operator and the efficiency of the apparatus.

27. The defendants except to the finding marked "34" of the master's report which finds that:

"The present cost to the Consolidated Gas Company and the Astoria, Light, Heat & Power Company of such bituminous coal is at least $6 per gross ton, and the cost of such bituminous

gas coal to the Consolidated Gas Company and the Astoria Light, Heat & Power Company as of October, 1919, was $5.90 per gross ton,"

on the ground that there is no evidence tending to support it, it is contrary to the evidence and the same is not supported by the evidence; and the master should have found that the present cost of bituminous coal is not a fair criterion of prices because at the present time conditions are abnormal, unusual and unprecedented.

28. The defendants except to the finding marked "35" of the master's report which finds that:

"The cost of the bituminous gas coal used in the manufacture of coal gas at the plants of the Astoria Light, Heat & Power Company during the year 1918, including the labor handling thereof, was, under the prices and rates of pay at that time in force, 46.25 cents per thousand cubic feet of gas made, and during the eight months ended August 31, 1919, was 55.86 cents per thousand cubic feet of gas made,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and there is no evidence tending to support it; and the master should have found that in the year 1918, and the first eight months of 1919, were abnormal periods, and the cost of bituminous coal cannot be fairly judged by such periods.

29. The defendants except to the finding marked "36" of the master's report which finds that:

"In the process of coal gas manufacture there are derived per thousand cubic feet of gas made certain residuals to be credited to the cost of manufacture in quantities, and the market or sale price thereof, as of October, 1919, is as follows:

Coke and breeze for sale or use for other than coal-gas uses, 100 pounds at $6.347 per gross ton.....	$.2833
Coal tar, 1.2 gallons at $.044 per gallon.....	.0528
Ammoniacal liquor (sulphate), 1.5 pounds at $0.176 per pound.....	.0264
Ammonia (absolute), .03 pounds at $.12 per pound.	.0036
Ammonia sulphate, .30 pounds at $.0485 per pound.	.0146
Cyanogen, .15 pounds at $.29 per pound.....	.0435
Total	$.4242,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and it has no evidence tending to support it; and the master should have found that the quantity of residuals derived per thousand cubic feet of gas manufactured should be based upon an economically operated plant or upon the experience of complainant and no set rule can be laid down as to how many gallons of coal tar, how many pounds of

coke and breeze, how many pounds of ammoniacal liquor, how many pounds of ammonia, ammonia sulphate and cyanogen may be obtained per thousand cubic feet of gas, and that there was no evidence offered by complainant as to the fair and reasonable market price of the above named residuals; but, on the contrary, complainant's own records show that there was produced at the 14th street plant an average from 1909 to 1915, of 113 pounds of coke per thousand cubic feet of gas made, and that the same never fell below 110 pounds except in one year, when it was 104 pounds, and that the prices given for the residuals mentioned in said 36th finding are the lowest prices obtained and received by complainant during the years 1918 and 1919.

30. The defendants except to finding marked "37" of the master's report which finds that:

"As a deduction from the foregoing residual credits aggregating 42.42 cents per thousand cubic feet of gas made, however, there is an expense of handling residuals including the cyanogen extraction, amounting to approximately 5 cents per thousand cubic feet of gas made, making the net proceeds from residuals, 37.42 cents per thousand cubic feet of gas made,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and there is no evidence tending to support it; and the master should have found that the amount allowed for residual credit is unfair and too low and the expense of handling same is too high, and that in making the said finding the master has used the hypothetical figure submitted by Witness Woods (Ex. 334 for Iden.) which exhibit was not in evidence and the master ruled upon the trial that he would not take any of the prices given by Witness Woods for coal-gas cost.

31. The defendants except to the findings marked "38" of the master's report which finds that:

"In order to enrich coal-gas so that the same shall fulfill the statutory standard of 22 candle power there is required the use of approximately 1.6 gallons of additional gas oil in the manufacture of water-gas of a higher candle power to be mixed with such coal-gas,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

32. The defendants except to the finding marked "39" of the master's report which finds that:

"In the course of the process of this enrichment there is derived a tar credit amounting to approximately 0.25 gallons of tar per thousand cubic feet of gas made, which had a market or sale price of 4 cents per gallon as of October, 1919,"

on the ground that the same is not supported by the evidence,

is contrary to the evidence and there is no evidence tending to support it; that the master should have found, in accordance with the testimony, that oil tar was sold by complainant on an average of $0.6 per gallon for 1918 and 1919.

33. The defendants except to the finding marked "42" of the master's report which finds that:

"During the year 1918, under the prices of labor and materials at that time in force the cost of coal-gas manufacture (exclusive of gas storage expense) was 33.95 cents per thousand cubic feet of gas made in the plants of the Astoria Light, Heat and Power Company, and during the eight months ending August 31, 1919, the cost of coal-gas manufacture (exclusive of gas storage expense) under the prices of materials and labor at that time in force, was 47.31 cents per thousand cubic feet of gas made in the plants of the Astoria Light, Heat & Power Company,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found, in accordance with the evidence, that the year 1918 was abnormal, unusual and unprecedented, so was also the first eight months of 1919, and the prices of material and labor were extremely high and said periods are not fair criterions of the cost of coal-gas manufactured.

34. The defendants except to the finding marked "43" of the Master's report which finds that:

"It is impossible on the record in this case to make any finding as to the cost of making coal-gas in the plants of the complainant company at the 14th and 42d Street plants during the year 1918 or during the first eight months of the year 1919,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found, in accordance with the testimony, that whatever gas was made at these two plants in recent years has been at a prohibitory cost per thousand cubic feet and that said plants should be scrapped and ought not to have been maintained as coal-gas plants for several years last past, and are now no longer used and useful in the making of gas, and should be excluded both in the rate base and from the expense of making and producing gas, and said plants are inadequate, obsolete and rundown and have no modern, up-to-date and efficient machinery with which to make gas and are being carried by the Consolidated Company largely for the purpose of this cause of action and are carried by the complainant for the purpose of increasing the amount upon which it may enjoy a return under the statute and also for the purpose of enhansing the cost of making and producing gas to the end that the statute here in question may be destroyed.

35. The defendants except to the finding marked "44" of the master's report which finds that:

"On the basis of the ratio of 22 per cent. coal-gas and 78 per cent. water-gas obtaining in the manufacture of gas supplied to the consumers of the complainant company, the average station cost of such gas, as of September 1, 1919, including the cost of gas storage, was not less than 47.09 cents per thousand cubic feet of gas made and not less than 50.63 cents per thousand cubic feet of gas sold. The average station cost of such gas at this time is not less than 30.63 cents per thousand cubic feet sold,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that the time taken by him in said 44th finding, viz: September 1, 1919, was an abnormal, unusual and unprecedented time and is not a proper date to take in this case, and that according to complainant's own records, as shown by its books, the average cost of making gas per thousand cubic feet of gas sold, was as follows:

1906	36.00¢
1907	36.29¢
1908	36.69¢
1909	31.88¢
1910	30.25¢
1911	30.35¢
1912	30.86¢
1913	33.25¢
1914	35.13¢
1915	29.54¢
1916	31.49¢
1917	39.98¢

36. The defendants except to the finding marked "45" of the master's report which finds that:

"Prior to the year 1906 the officers of the complainant company concluded in good faith that the time had arrived when further extensions of gas manufacturing plants on Manhattan Island would not be permitted and it was absolutely essential that manufacturing facilities be established elsewhere. In accordance with this conclusion the complainant company caused to be organized the Astoria Light, Heat & Power Company and caused to be erected at Astoria, Long Island City, two coal-gas units and the one water gas unit above described, and the complainant company also caused a tunnel to be built from the works at Astoria to the Borough of The Bronx to convey gas to the Borough of Manhattan, which tunnel was constructed by the East River Gas Company, which had built the so-called Ravenswood tunnel prior to the acquisition of any stock in-

terest in the East River Gas Company by the New Amsterdam Gas Company or in the New Amsterdam Gas Co. by the Consolidated Gas Co. The franchises of the Consolidated Gas Company did not give it any right to construct a tunnel under the East River."

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

37. The defendants except to the finding marked "46" of the master's report which finds that:

"During the year 1918, the complainant company sold to its consumers 18,029,245,000 cubic feet of gas and during the 1st 8 months of 1919 sold to its consumers 12,253,567,100 cubic feet of gas. The total sales of the complainant company during the year 1919 were at least 18,500,000,000 cubic feet, and during the year 1920 the sales of the complainant company will amount to at least 19,000,000,000 cubic feet,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that of the gas sold in 1918 there was sold to the city of New York for city, building and street lighting at 75c per M. cubic feet, 117,455,000 cubic feet, and that there was used by complainant company 67,428,000, and there was sold to private consumers 17,911,790,000 cubic feet and that table 157 (Defts.' Ex. AA122) correctly and accurately shows the gas production and sales of complainant company for the years 1906 to 1918, inclusive, and is taken from complainant's reports filed with the Public Service Commission, and that there was no evidence whatsoever offered in this case as to the sales of complainant company for the year 1920, and the amount of the gas which will be sold in 1920 is purely surmise and guess on the part of the master.

37. The defendants except to the finding marked "47" of the master's report which finds that:

"In the manufacture and sale of gas, a percentage of the gas made is lost, due to condensation, differances in temperature at the consumers' meters, slow meters, leaks and the like. I find that unaccounted for gas reasonably represents approximately 17 per cent. of the gas made and that in calculating the requirements of the complainant company, that figure should be used as a basis for computation,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that table 157 (Defts.' Ex. AA122) correctly and accurately shows the amount of gas unaccounted for for the years 1906 to 1918, inclusive, according to complainant's reports to the Public Service Commission; and that the average reported gas unaccounted for

by complainant company for the years 1906 to 1916, inclusive, was 3.06%, and unaccounted for gas for 1906 to 1918, inclusive, was an average of 4.08% and that 4% is more than a reasonable allowance for unaccounted for gas for complainant company in this case.

38. The defendants except to the finding marked "49" of the master's report which finds that:

"Upon the basis of 7 per cent. unaccounted for gas, the complainant company should have a rated daily manufacturing capacity of at least 108,500,000 cubic feet, allowing for reasonable reserve capacity,"

on the ground of the same not being supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

39. The defendants except to the finding marked "50" of the master's report which finds that:

"At the present time the complainant company has the following plant capacities per day:

"(a) Twenty-first Street, 28,500,000 cubic feet;

"(b) Ninety-ninth Street, 5,500,00 cubic feet;

"(c) Fourteenth Street, 5,000,000 cubic feet;

"(d) Forty-second Street, 4,500,000 cubic feet, in addition to which it has available the capacity of the Astoria plant of 50,000,000 cubic feet, making a total of 93,500,000 cubic feet daily capacity,"

on the ground that the same is not supported by the evidence, is contrary to the evidence, and has no evidence tending to support it; and the Master should have found that the complainant company has made and can make at the 21st Street plant in one day 22,737,000 cubic feet of gas; at the 99th Street plant 6,795,000, and can make at the Astoria plant a daily capacity of 60,000,000 cubic feet.

40. The defendants except to the finding marked "51" of the master's report which finds that:

"If the 14th and 42d Street plants were discarded, it would be absolutely necessary for the complainant company to find equal plant capacity elsewhere at a cost of not less than the present book cost and the value of those stations."

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that the 14th and 42d Street plants are no longer used and useful in making gas in the City of New York, and should be scrapped and are a liability to complainant in conducting its gas business, and that a plant capacity equal to that of the 14th and 42d Street plants could be erected on land now owned by the Astoria Company for not more than one-fifth of the book cost of said two plants, which is over $6,000,000; and the master is further requested

to find that any additional units necessary could also be installed at the 21st and 99th Street plants of the complainant company at a small cost.

41. The defendants except to the finding marked "52" of the master's report which finds that:

"In making up its present deficiency of plant capacity, the complainant company has been using 10,686,000 cubic feet of the manufacturing plant capacity of the water-gas plant of the New York Mutual Gas Light Company. Pursuant to the agency agreements, an interchange of gas takes place between the complainant and the Standard and New Amsterdam companies, as the result of which the complainant is sometimes a debtor and sometimes a creditor company, on account of the gas so interchanged,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

42. The defendants except to the findings marked "55" of the master's report which finds that:

"An additional 20,000,000 cubic feet water-gas unit is at present being constructed in connection with the plant of the Astoria Light, Heat & Power Company, under a contract calling for its completion on or before December 1, 1920, at an approximate expense of $1,500,000 for the additional structures, apparatus, equipment, connections and the like required for the installation and operation of such 50,000,000 cubic feet water-gas unit. The use of the 10,686,000 cubic feet of manufacturing plant capacity of the New York Mutual Company, hitherto used by the complainant company, will be discontinued upon the completion and operation of the new water-gas unit at Astoria. I have, therefore, excluded from consideration, in determining the investment in manufacturing plant, used in the manufacture of gas sold by the complainant company, the $2,198,377.35 representing the investment in the portion of the plant of the New York Mutual Company hitherto used in the manufacturing gas sold by the Consolidated Company, and have included, in lieu thereof, one-half of the additional investment required for the new water-gas unit in course of construction at the Astoria plant,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

43. The defendants except to the finding marked "54" of the master's report which finds that:

"I find that it is absolutely essential, for the purpose of meeting the demands of its consumers, that the complainant company use all of the four plants on Manhattan Island above described as well as all of the plant facility now under construction, or in place thereof other plant capacity, and I also find that in

connection with the use of the Astoria plant, the complainant company must use the so-called Astoria Tunnel for the purpose of conveying gas from Astoria to Manhattan,"
on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that the 14th and 42d Street plants are not used and useful, and whatever use the said two plants have been put to has been a mere subterfuge in this case and for the purpose of the case and there is no evidence that said plants are absolutely essential for the purpose of meeting the demands of complainant's consumers.

44. The defendants except to the finding marked "55" of the master's report which finds that:

"In arriving at the cost of taxes, there must be included not alone the manufacturing plants on Manhattan Island, but also the present manufacturing plant at Astoria and the tunnel conveying gas from Astoria to Manhattan, and in addition thereto, taxes on one-half of the additional plant facilities now under construction at Astoria or other plant facility to that same extent,"
on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

45. The defendants except to the finding marked "56" of the master's report which finds that:

"I find that the average cost of taxes applicable to the manufacture and distribution of one thousand cubic feet of gas, whether that figure be arrived at by excluding the 14th and 42d Street plants but including other plant capacity in place thereof to an equal amount and including all of the present Astoria plant, and the Astoria Tunnel and one-half of the additional unit now under construction at Astoria, or by including the 14th and 42d Street plants and all of the existing Astoria plant, together with the tunnel and one-half of the additional facilities, or by excluding the 14th and 42d Street plants, but including the present Astoria plant and all the additional 30,000,000 cubic feet plant, to be not less than seven and one-half cents (7½c.) per thousand cubic feet of gas sold,"
on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and on the further ground that the figure used by the master in said 56th finding is hypothetical and arbitrarily fixed by the master and included therein are many improper items, and the master should have found that the evidence shows that the item for taxes should not exceed 6c. per thousand cubic feet of gas sold, and the cost of taxes by the complainant company included taxes on pieces of property not used and useful and which should not be included in the gas-making branch of the business.

46. The defendants except to the finding marked "57" of the master's report which finds that:

"There must also be added to the cost of making and distributing gas the cost of maintaining the Astoria Tunnel. I fix this cost at not less than one cent (1c.) per 1,000 cubic feet of gas sold."

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that the cost of maintenance of this tunnel is not more than .35 of one cent per thousand cubic feet of gas sold, and the Astoria tunnel should not be chargeable to the consumers of complainant company.

47. The defendants except to the finding marked "58" of the master's report which finds that:

"I find the average cost of renewals and replacements which must be added to the cost of gas to be three cents (3c.) per thousand cubic feet of gas sold,

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

48. The defendants except to the findings marked "59" of the master's report, which finds that:

"In addition to the items heretofore referred to there must be added to the cost of gas to the consumer various items entering into the cost of distribution, including distribution, superintendence, supplies and expenses, meter and installation work, work on consumers' premises, repairs on street mains, repairs on services, repairs on meters, repairs on buildings (branches, street departments, shops, etc.); repairs on tools (street departments, shops, etc.); repairs on gas appliances, public street lighting, commercial expenses, salaries general office, supplies and expenses general office, legal expenses, claims and arrears, insurance, vacation, sickness, contribution to employees' mutual aid, society, superannuation, stable expenses, automobile expense, claims for damages, uncollectible bills, interest on consumers' deposits, use of distributing system and miscellaneous general expenses, and I find that if the operation of the Astoria plant be combined with the general operations of the plaintiff company that the cost of all of these items will not be less than twenty cents (20c.) per thousand cubic feet of gas sold,"

on the ground that there is not sufficient evidence to support it, is contrary to the evidence and has no evidence tending to support it; and the master should have found, in accordance with the evidence, that the total cost of distribution per thousand cubic feet should not exceed 18c., and that there should be excluded from the cost of distribution all or a large part of the following items: repairs to street mains, repairs on services, re-

pairs on meters, repairs on buildings, repairs on gas appliances, public street lighting, salaries general office, supplies general office, legal expenses, claims and arrears, insurance, vacation and sickness, contribution to employees, Mutual Aid Society, superannuation, automobile expense, interest on consumers' deposits, use of distributing system and miscellaneous general expenses.

49. The defendants except to the finding marked "60" of the master's report which finds that:

"Included in the cost of distribution are various items, such as commercial expenses, having to do with the sale and rental of appliances and the like, resulting in miscellaneous operating revenue to the complainant company. In 1918 the miscellaneous operating revenue represented 7.28 cents per thousand cubic feet; for the first eight months of 1919 this same revenue showed 6.62 cents per thousand cubic feet. The reasonable average would appear to be 6.95 cents. I, therefore, find that 6.95 cents per thousand cubic feet should be credited against the cost of making and distributing gas on account of miscellaneous revenue,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

50. The defendants except to the finding marked "61" of the master's report, which finds that:

"I find the total cost of the gas delivered to consumers by the Consolidated Gas Company to be at least 82.13 cents per thousand cubic feet, from which should be deducted 6.95 cents for miscellaneous revenue, making the net cost of gas delivered to the consumer 75.18 cents per thousand cubic feet,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

51. The defendants except to the finding marked "62" of the master's report which finds that:

"I find the average selling price of gas, including that sold to the City of New York at 75 cents per thousand cubic feet, to be 79.91 cents per thousand cubic feet, showing a net profit to the complainant company, as of September, 1919, of not more than 4.73 cents per thousand cubic feet of gas sold,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that the complainant has made a return on the property used in the gas business from 1906 to 1919, inclusive, in excess of 6% more than $25,845,513.00, as shown by its own books and records.

52. The defendants except to the finding marked "63" of the master's report which finds that:

"Exclusive of working capital, I find the fair value of the property used and needed in the manufacture, transmission and distribution of the quantity of gas required by the consumers of the complainant company, as of January 1st, 1919, and since that date, and on which it is entitled to have a fair return computed, to be at least the sum of $71,054,351.14, arrived at as follows:

Property other than particularly specified	$38,675,393.99
Franchises	7,781,000.00
Astoria property	17,169,342.57
Astoria tunnel	5,178,614.58
One-half the cost of the new 30,000,000 unit	2,250,000.06
Total	$71,054,351.14,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and on the further ground that the master improperly included franchises, Astoria property, Astoria tunnel and one-half of the cost of new 30,000,000 unit, and also included therein property which is not used and useful in making gas, and the master should have found that the fair value of complainant's property used and useful from 1906 to 1918, inclusive, is accurately and correctly shown on table 259 (Defts. Ex. AA166) and in the year 1918, amounted to no more than $29,275,543.00, and that the defendants' exhibits AA126 and AA303 correctly show, by lot and block number, the property used and useful by complainant in its gas business from 1906 to 1918, inclusive.

52. The defendants except to finding marked "64" of the master's report which finds:

"That the complainant Consolidated Gas Company owns and uses in its gas business, and did so own and use on December 31st, 1918, and ever since, the following parcels of real property within the Borough of Manhattan and The Bronx, in the City of New York, used and useful in its gas business and included in the first item of the property referred to in finding No. 63 above:

Station	Block No.	Lot No.
Hester St. Office	239	1 and 5
General Office Bldg	870	47 and 60
14th St. Holder Station	989	1
14th St. Station	982	13
" "	988	1
" "	991	1 and 47
E. 17th St. Yard	985	7, 19, 20
21st St. Station	951	35

Station	Block No.	Lot No.
21st St. Station	952	7, 29, 30 and 35
" "	953	1
" "	978	5 and 6
" "	979	1 and 27
" "	987	37
42nd St. Station	1089	1
" "	1090	23
" "	1107	7
44th St. Holder Station	1092	7 in part
" " "	1093	9 " "
57th St. Office Bldg.	1028	38
E. 63rd St. Holder Station	1457	6
W. 65th St. Yard	1177	21
W. 65th St. Holder Station	1157	1
99th St. Works	1670	1
" "	1692	1
E. 111th St. Yard	1683	18
E. 111th St. Holder Station	1682	8 and 11
E. 111th St. Garage and Storage Yard	1704	5
E. 111th St. Dock Property	1712	2
3rd Ave. Commercial Office	1642	32 and 33
W. 132nd St. Holder Station	1998	50-3-4-5-6
" " "	1998	1
E. 132nd St. Tunnel Head and Storage Property	2583	360
W. 159th St. Meter Shop	2108	23
Kingsbridge Holder Station	3236	1

on the ground that same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the Master should have found that the defendants' exhibits AA126 and AA303 correctly show, by lot and block, the part of the property used and useful in the complainant's gas business in the years 1906 to 1918, inclusive, and table 259, (Defts. Ex. AA166) shows the fair value of complainant's property used in the gas business from 1906 to 1918, inclusive.

53. The defendants except to so much of the finding marked "65" of the master's report which finds that:

"In addition to the foregoing, the Astoria Light, Heat & Power Company owns and uses, and did own and use on December 31, 1918, and ever since, land in the Borough of Queens of which the value (unimproved) determined and assessed by the tax authorities of the City and State of New York, as of October 1, 1918, for the levying of taxes for the year 1919, was $2,438,910, making a total of $11,970,185 of assessed value of land (unimproved),"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

54. The defendants except to the finding marked "67" of the master's report which finds that:

"The plant, machinery and equipment used in the gas business of the complainant company have been and are maintained in excellent operating condition; proper repairs, renewals and replacements have been made; and the same are now in as high a state of efficiency as if new,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it.

55. The defendants except to the finding marked "68" of the master's report which finds that:

"I find that the present cost of producing the property described in finding No. 63 above is largely in excess of the sum found by me; and I further find that the present value of the property described in finding No. 63, if based on the reproduction cost, less depreciation, would be in excess of the said sum of $71,054,351.14,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that the fair value of complainant's property used and useful in making gas from 1906 to 1918, inclusive, is accurately and correctly shown by Table 259 (Defts.' Ex. AA456).

56. The defendants except to finding marked "69" of the master's report which finds that:

"I find that the complainant company is entitled to include, in the amount upon which it is entitled to a fair return, the sum of $3,800,000 for working capital,"

upon the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and on the further ground that the figure used by the master for working capital is an arbitrary one selected by him; whereas, he should have found that the complainant is entitled to include upon the amount to which it is entitled to fair return as working capital, only the sum of $1,303,000 for 1918, and that table 290 (Defts.' Ex. AA429) correctly and accurately shows the amount of working capital for 1906 to 1918, inclusive, upon which complainant is entitled to a fair return.

57. The defendants except to the finding marked "70" of the master's report which finds that:

"I find the total amount on which the complainant company is entitled to have a fair return computed, including working capital, to be $74,854,351.14. On the basis of a daily plant capacity of 108,500,000 cubic feet and 18,500,000,000 cubic feet

of sales, the sum of $74,854,351.14 is slightly in excess of $4 per thousand cubic feet, and on the basis of 19,000,000,000 cubic feet, a few cents less than $4 per thousand cubic feet of gas sold fairly represents the actual investment in property used in the manufacture, transmission and distribution of the gas sold by the complainant company, and such investment may, for the purposes of this case, be taken to be at least that sum,"
on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that the total amount upon which complainant is entitled to a fair return, including working capital, as shown by table 295 (Defts.' Ex. AA456) for each year from 1906 to 1918, inclusive, and for the year 1918 should not exceed the sum of $29,275,553.

58. The defendants except to the finding marked "71" of the master's report which finds that:

"During the twelve months ended December 31, 1918, the eight months ended August 31, 1919, and the twelve months ended October 31, 1919, the operating revenues of the gas business of the complainant company were not sufficient to pay the reasonable and necessary costs of the manufacture, transmission and distribution of gas and provide a reasonable return upon the value of the property owned and used by the complainant in the manufacture of the gas sold by it to its consumers,"
on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that complainant has made a return during the years of 1906 to 1918, inclusive, in excess of 6 per cent., in the amount of $25,845,513.00.

59. The defendants except to the finding marked "72" of the master's report which finds that:

"On the basis of my finding of a net profit of not more than 4.73 cents per thousand cubic feet of gas sold, and approximately 19,000,000,000 cubic feet of sales for the year 1920, the complainant company's return, if any, will be not more than $898,700, representing no more than 1.2 per cent. upon the fair value of the property used and needed as hereinbefore found, or amounting to a fair and reasonable return upon no more than $11,233,750 of the fair value of the property used and needed as hereinbefore found,"
on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the master should have found that complainant enjoyed a net profit and return annually from the sale of gas from 1906 to 1918, inclusive, which is correctly and accurately shown by the following table:

Summary of Investment in Property Used in the Gas Business and Return Thereon, 1906-1918.

Year	Capital sum per AA466	General Office Property (a)	Astoria Investment (b)	Total Investment (c)	Return Computed at 6 per cent.	Actual return	Excess over 6% return	7c. "contingent return" Item (d)
1906	$21,937,190	$65,173	$8,385,000	$30,387,363	$1,823,242	$4,865,429	$3,042,187	$971,581
1907	22,413,477	65,199	10,432,302	32,910,978	1,974,659	3,969,746	1,995,087	1,032,656
1908	22,493,822	65,224	10,832,302	33,391,348	2,003,481	3,470,306	1,466,825	1,006,682
1909	22,146,839	69,772	11,082,302	33,298,913	1,997,935	4,501,457	2,503,522	1,070,919
1910	23,193,132	75,280	11,382,302	34,650,714	2,079,043	4,820,853	2,741,810	1,123,099
1911	24,462,223	260,977	13,482,302	38,205,502	2,292,330	4,783,465	2,491,135	1,132,261
1912	25,677,990	637,436	14,582,302	40,897,728	2,453,864	4,564,349	2,110,485	1,164,878
1913	26,168,540	1,887,293	15,682,302	43,738,135	2,624,288	4,595,746	1,971,458	1,158,761
1914	25,626,427	3,298,736	15,500,000	44,425,163	2,665,510	4,351,628	1,686,118	1,155,623
1915	25,071,952	3,388,401	16,500,000	45,010,531	2,700,632	5,004,662	2,304,030	783,991
1916	25,007,819	3,031,605	16,500,000	44,858,535	2,691,512	4,892,752	2,201,240	.....
1917	25,207,061	3,011,380	16,500,000	45,207,701	2,712,462	3,842,156	1,129,694	.....
1918	25,642,645	3,045,848	16,500,000	45,776,001	2,746,560	2,948,482	201,922	.....
					$30,765,518	$56,611,031	$25,845,513	$10,600,452

(a) From Exhibit AA466, plus $101,938 for cost of easterly extension, 1915-1918 ($45,338 land and $56,600 building).
(b) From A. Sangster's report (p. 11762, lines 1-3).
(c) Includes cost of W. 57th St. branch office building (AA466) plus $300,000 for necessary land per testimony of J. J. Boylan ($50,178 in 1915, $319,111 in 1916, $459,260 in 1917, and $587,508 in 1918).
(d) Being the difference between the company's charge of 10c. per M sold 1906-1914, and 3c. included in expense in defendant's summary. In 1915, the last year the charge was reported in operating expenses, the difference was only 5c.
AFW/3/20/1920

60. The defendants except to finding marked "73" of the Master's report which finds that:

"The reasonable and proper rate of return upon the capital invested in the plants, distributing system, properties and business of the complainant company I find to be not less than eight (8) per cent. per annum, amounting to $5,988,348.09, calculated upon the fair value of the property used and needed as hereinbefore found,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence tending to support it; and the Master should have found that the reasonable and proper rate of return on the fair value of complainant's property used and useful in making gas should not be more than 6 per cent., and that a return of 5 per cent. would not render the statute in question confiscatory.

61. The defendants except to the finding marked "74" of the Master's report which finds that:

"I find that complainant company has complied with the provisions of chapter 125 of the laws of 1906 with reference to candle power and the requirements of law regarding pressure,"

on the ground that the same is not supported by the evidence, is contrary to the evidence and has no evidence supporting it; and the Master should have found that complainant has not complied with the provisions of chapter 125 of the Laws of 1906 with reference to candle power and pressure, and that the uncontradicted evidence in the case is to the effect that complainant violated the statute by a failure to furnish its consumers with 22 candle power gas, and the number of times complainant violated the statute in failing to furnish its consumers with 22 candle power gas were as follows:

	1916	1917	1918	1919
January	83	73	240	124
February	70	53	208	67
March	58	45	157	103
April	39	31	129	97
May	22	31	151	36
June	52	88	221	82
July	37	58	260	53
August	42	103	263	53
September	70	69	230	8
October	84	44	260	5
November	73	119	222	4
December	52	101	188	6
Total	682	815	2,529	86

and the master should have found that he refused to allow defendants to offer any evidence of the failure of complainan

to furnish its consumers with 22 candle power gas prior to the year 1916.

61. The defendants except to the finding marked "76" of the Master's report which finds that:

"Various matters comprised within the issues referred to by the order of May 16, 1919, I have discussed in greater detail in a separate opinion which is herewith submitted and made a part of this report. It is my intention that the facts, and the conclusions regarding the law, set forth for reasons of convenience in that separate document, shall be deemed a part hereof, with the same force and effect as though they had been physically incorporated in this report,"

and the defendants hereby except in detail to all of the statements of fact set forth by the Master in his so-called separate opinion, and to the conclusions regarding the law set forth in his so-called separate opinion, the same as if defendants specifically except to each and every one; and also defendants request this court to return the report to another Master in order that defendants may have the facts found separately stated, or this court make new findings in accordance with the order appointing the Special Master.

62. The defendants except to the finding marked "77" of the Master's report whether the same be treated as a finding of fact or a conclusion of law, on the ground that same is not supported by the evidence, is contrary to the evidence and there is no evidence tending to support it.

Dated, May 25, 1920.

Respectfully submitted,

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WILLIAM HAYWARD,
ELY NEUMANN,
JOHN HOLLEY CLARK, JR.,
of Counsel.

Exceptions of the Defendants to the Opinion of the Special Master Filed in Connection With His Report Dated May 5th, 1920.

United States District Court, Southern District of New York.
CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
against
CHARLES D. NEWTON, as Attorney General of the State of New York, and others, Defendants.

Now come the defendants Charles D. Newton, as Attorney-General of the State of New York; Edward Swann, as District Attorney of the County of New York; and Lewis Nixon, constituting the Public Service Commission of the State of New York for the First District, and except to the statements and to the findings of fact and conclusions of law contained in the opinion filed in connection with his report by Abraham S. Gilbert, Special Master, in the following particulars, to wit:

First. The defendants except to the statement or finding on page 29, folios 85 and 86 of the printed opinion that—"Some of the property purchased was water front property at a time when the high water mark of the East River was much further west of Manhattan Island than it is today, so that considerable of the land which was in occupation by the Gas Companies in 1884 was made land as the result of filling in and reclaiming land under water then part of the East River." On the ground that said statement or finding is not supported by the evidence and is contrary to the evidence in the case, and that there is no evidence to sustain such statement or finding.

Second. The defendants except to the statement or finding on page 29, folio 87 of the printed opinion that—"In the Summer of 1884, the quoted value of the stock of these six companies in the aggregate was Thirty-nine million, seventy-eight thousand dollars ($39,078,000.)." On the ground that there is no evidence to sustain such statement or finding.

Third. The defendants except to the statement or finding on page 31, folio 93 of the printed opinion that—"It is impossible for anyone to say at this time that the property, assets and franchises transferred by the constituent companies to the complainant company, were not of the fair aggregate value fixed at that time;" and to the statement to the same effect on page 32 of said printed opinion that—"There is no evidence in this case which would justify a finding that the values fixed for the purpose of consolidation in 1884 did not represent the fair value at that time of the property acquired by the Complainant." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence to support it. The Master should have found that the property, assets and franchises referred to were conclusively proven to be

of less than the fair aggregate value fixed at that time by the interested parties, and that he should have found further that the only obstacle to ascertain this fact with absolute certainty was the loss or destruction by the complainant company of the books of its constituent companies which had been in its possession in 1906.

Fourth. The defendants except to the statement or finding on pages 31 and 32, folio 91 of the printed opinion that—"Counsel for the defendants, particularly the learned Attorney-General, attempted to show the exact cost of these various properties to the constituent companies. I think they absolutely failed in that attempt." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that the defendants not only attempted to but did show that the actual cost of the various properties to the constituent companies was far less than the amount at which they were appraised in 1884.

Fifth. The defendants except to the statement or finding on page 32, folio 96 of the printed opinion that—"The majority of the (Gilbert) Committee, however, appeared to have reached a contrary conclusion." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Sixth. The defendants except to the statement or finding on page 34 folios 102 and 103 of the printed opinion that—"The Courts of this State and the defendant Commission alike have declared the law to be that a public utility is not required to sell one of its products at a loss because it sells another product at a reasonable rate or at a profit. Even if the same company sells both gas and electricity, which is not the fact as to the complainant, it is constitutionally entitled to charge reasonable rates for each, and electric consumers could not be made to bear the burdens of a confiscatory rate for gas." * * * "Under the authorities, the complainant company appears entitled to have the rate chargeable by it for gas kept adequate, without regard to the rate charged for electricity by companies in which it owns stock control." On the ground that such is not the law, nor did any of the cases cited have in contemplation any such monopoly of the lighting and heating business of the greatest city in the world as is here found.

Seventh. The defendants except to the statement or finding on page 35, folio 105 of the printed opinion that—"The total maximum daily gas capacity of these four plants is 43,500,000 cubic feet a day." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that the 21st Street plant whose rated daily capacity is 28,500,-

000 cubic feet, made on one day in 1917 31,296,000 cubic feet; on one day in 1918 32,345,000 cubic feet, and on one day in 1919 32,737,000 cubic feet; that the 99th Street plant whose rated capacity is 5,500,000 cubic feet, made on one day in 1917 6,299,000 cubic feet, on one day in 1918 6,796,000 cubic feet, and on one day in 1919 6,710,000 cubic feet, so that the total maximum daily capacity of these four plants is not less than 49,000,000 cubic feet.

Eighth. The defendants except to the statement or finding on page 35, folio 105 of the printed opinion that—"They (the 14th and 42nd Street coal gas plants) have been fired every Winter in anticipation of a possible demand which would require an output at these plants." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that these plants are extremely inefficient, have none of the modern facilities and the cost of making gas in them is and has been for some years prohibitory, and that in December 1917, and in January 1918, and in December 1919 and in January 1920, the only periods when a stress of severe weather might have indicated the need, if ever, for the capacity of these plants, they were, because of their peculiar inadaptibility for use as reserve plants, not operated so as to produce gas on the maximum days in such months, but the gas on such maximum days was readily furnished by the other plants of the consolidated system without the aid and assistance of these dilapidated plants. The Master should have found further, that the only reason these plants were ever fired up for operation, was for the purpose of keeping them in use as gas properties in anticipation of such a litigation as the present, and so that they might be carried by the consumers of the complainant company until such time as the valuable water front real estate on which they are erected can be profitably sold by the complainant company.

Ninth. The defendants except to the statement or finding on pages 35 and 36, folios 105 and 106 of the printed opinion that—"The complainant company for some years past has only manufactured in its own plant a maximum of approximately 34,000,000 cubic feet." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that the complainant company has a daily capacity in its 99th Street plant of not less than 6,796,000 cubic feet, and in its 21st Street plant of not less than 32,737,000 cubic feet, and that its actual maximum daily capacity in those two plants on one day is not less than 39,533,000 cubic feet.

Tenth. The defendants except to the statement or finding on page 36, folio 106 of the printed opinion, that "In 1918, out

of a total of over 18,000,000,000 cubic feet, of gas sold, it only made in its own plants about 8,000,000,000 cubic feet, the balance of the gas coming from the New York Mutual, the New Amsterdam and Astoria companies. During the first eight months of 1919, out of a total of over 18,000,000,000 cubic feet sold, a little over 4,000,000,000 feet was made by the complainant company, the rest coming from other sources." On the ground that the same is not supported by the evidence, is contrary to the evidence and that there is no evidence tending to support it.

Eleventh. The defendants except to the statement or finding on page 37, folios 109 and 110 of the printed opinion, that— "The complainant company entered into what is called 'agency agreements' with the Standard, the New York Mutual and the New Amsterdam, pursuant to which there was an exchange of gas between the Consolidated Company and its subsidiaries on the basis of station cost plus 10 per cent.; and the complainant company also made an agreement with the Astoria Company, pursuant to which it agreed to take all of the output of the Astoria Company at station cost, plus taxes, insurance, administration and other expenses, and 7 per cent. return on property investment." On the ground that the same is not supported by the evidence, is contrary to the evidence and that there is no evidence tending to support it. The Master should have found that the so-called "agency agreements" were not properly proven, nor was there any competent proof as to an agreement with the Astoria Company. The Master should further have found that the complainant company has paid for gas to the Astoria Company not only what purported to be station cost plus taxes, insurance and administration, but various amounts whose reasonableness was not proof for the maintenance and for the return upon the investment in certain so-called jointly used facilities and mains, and for certain tunnels. The Master should further have foud that the complainant company has paid for gas to the Astoria Company a return calculated monthly on the basis of seven (7%) per cent. per annum, so that it amounted to more than seven (7%) per cent. per annum upon the value assumed but not proven to be the investment of the Astoria Company; and the Master should further have found that the said assumed investment of the Astoria Company included not only its investment in property, but amounts for current assets, working capital, reserves, etc., which were improperly included in such assumed investment.

Twelfth. The defendants except to the statement or finding on page 37, folios 110 and 111 of the printed opinion, that— "Subsequent to the original arrangement with the New York Mutual Company that agreement was amended so that for several years past in addition to cost plus 10 per cent., the Mutual

Company has been paid by the Consolidated Company a return on investment, on the theory that the Consolidated Company actually used a certain part of the plant capacity of the Mutual Company." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that there was no competent evidence that the complainant company actually used a certain part of the plant of the Mutual Company, nor was there any competent proof as to the actual value of the portion of said property declared to be used. The Master should further have found that no change was made in the basis of payments to the New York Mutual Company until the year 1918 when upon insufficient and faulty data and in contemplation of this litigation, Seventy-five thousand dollars ($75,000) per annum, in addition to what was agreed to be paid theretofore, was voluntarily and improperly paid to the said New York Mutual Company.

Thirteenth. The defendants except to the statement or finding on pages 37 and 38, folios 111 and 112 of the printed opinion, that—" So far as the agreements between the complainant company and the New Amsterdam, Standard and Mutual Companies, which provided for a cost plus 10 per cent. basis, there can be no criticism. That was unquestionably a fair basis." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that there is no competent evidence as to the so-called " agency agreement," and he should further have found that there is no competent evidence that a basis of cost plus 10 per cent. is a fair and reasonable basis for payment, nor is there any evidence tending to prove that the 10 per cent. paid in addition to what purported to be the cost to the New Amsterdam, Standard and Mutual Companies was a proper allowance for any service rendered by those companies.

Fourteenth. The defendants except to the statement or finding on page 38, folios 112 and 113 of the printed opinion that – "During 1918 and 1919 gas production at Astoria was curtailed somewhat by the United States Government's use of a part of the coal-gas plant for carbon manufacture for war purposes in 1918, the recurring inability to obtain adequate deliveries of bituminous coal, and, during the summer periods of 'off-peak' demand for gas, the adjustment of Astoria production so as not to interfere too much with the continued operation of the Manhattan plants and the permanency of their labor forces." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that except during a short period in the year 1918 there was no interference

by the United States Government with the use of the coal-gas plant of the Astoria Company, and that there was never any serious inability to obtain deliveries of bituminous coal but that the Astoria Company and the complainant company have always sufficient coal to manufacture the requisite quantity of gas at the Astoria plant, and that the supply of coal at the 14th and 42d Street plants in 1918 was so large that the complainant company was able to sell at a profit of over Seventy thousand dollars ($70,000.) twenty-one thousand (21,000) tons of bituminous coal during the year 1918. The Master should further have found that the production of the Astoria Company has been curtailed unreasonably in all the years, particularly from 1916 to 1919 for the purpose of giving an apparent excuse for firing up and operating the hopelessly inefficient plants at 14th and 42d Streets. The Master should further have found that the output of coal-gas at Astoria was unreasonably curtailed during the years 1916, 1917 and 1918 when the manufacture of coal-gas was much cheaper than that of other gas, and that there would have been a saving to the Astoria Company and consequently to the complainant company of several hundred thousand of dollars in 1917 and 1918 if the coal-gas plants of the Astoria Company had been operated to their reasonable capacity throughout the year.

Fifteenth. The defendants except to the statement or finding on page 39, folio 115 of the printed opinion that—"In reaching a conclusion in this case, therefore, I have not attempted to follow the paths of any of the parties to the action." On the ground that the master has taken, with the exceptions of certain small items, the figures presented by the complainant without diminution, addition or apparent analysis, and has incorporated such figures without change in his findings of fact.

Sixteenth. The defendants except to the statement or finding on page 39, folio 115 of the printed opinion that—"The complainant company must be prepared to make between 18 billion and 19 billion cubic feet of gas this year and must be prepared to make and send out probably 100,000,000 cubic feet of gas in one day before the end of this year." On the ground that the same is not supported by the evidence, is contrary to the evidence and that there is no evidence tending to support it. The Master should have found that there is no evidence and there can be no adequate judgment formed in advance to the probable output of the complainant company during this year, and particularly that no conclusion can be formed as to the maximum daily requirement of the complainant company in view of the extent to which such maximum daily requirement depends upon weather conditions which cannot be foreseen.

Seventeenth. The defendants except to the statement or finding on page 39, folio 116 of the printed opinion that—"The

complainant company now has a plant capacity on Manhattan Island of 43,300,000 cubic feet daily." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found the exclusive of the inefficient and useless 14th and 42d Street plants, the complainant company now has a plant capacity on Manhattan Island of not less than 39,500,000 cubic feet.

Eighteenth. The defendants except to the statement or finding on page 39, folio 116 of said printed opinion that—"It has a plant capacity in Astoria of 50,000,000 cubic feet." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that the actual plant capacity of the Astoria Company is not less than 20,844,000 cubic feet per day of coal-gas and not less than 36,000,000 cubic feet of water-gas, or a total of not less than 57,000,000 cubic feet.

Nineteenth. The defendants except to the statement or finding on page 39, folio 116 of the printed opinion that (the complainant company) is now constructing an additional 30,000,000 cubic feet water-gas plant so that it will have in all 123,000,000 cubic feet maximum daily capacity or about 23,000,000 cubic feet more than it will probably need on any one day in 1920 or in 1921." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that there is no competent evidence as to the actual construction of any additional plant capacity at Astoria, but that without any such additional capacity and without considering the useless 14th and 42d Street plants, the complainant company has in Manhattan and at Astoria, a plant capacity of not less than 96,000,000 cubic feet. That such capacity has been ample for the production of all the gas required to be made and furnished by the complainant company even through the extraordinary winter of 1919 and 1920, and that any additional requirement which may be needed for reserve capacity could have been and can still be erected at Astoria at a comparatively small expense.

Twentieth. The defendants except to the statement or finding on page 39, folios 116 and 117 of the printed opinion that the witnesses all agree "that when this reserve capacity gets down to about five per cent., additional capacity must be provided." On the ground that the same is not supported by the evidence is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that the witness Hine did not testify to this but testified on the contrary that five per cent. for the entire Consolidated System

was and is an adequate reserve. And the complainant's witness did not testify to this but that according to their testimony, the reserve of the company has entirely disappeared before any additional capacity was contemplated.

Twenty-first. The defendants except to the statement or finding on page 39, folio 117 of the opinion that—"It is expected that this additional gas plant in Astoria will be in operation in time to meet the winter demand of 1920, so that at that time all of the gas required by the complainant company can be made at Astoria and at the four manufacturing plants on Manhattan Island." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Twenty-second. The defendants except to statement or finding on page 40, folio 118, of the printed opinion that "I agree with the complainant company that it probably could not have secured a permit to build any more manufacturing plants on Manhattan Island, and was therefore compelled to go to Astoria." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Twenty-third. The defendants except to the statement or finding on page 40, folios 118 and 119 of the printed opinion, that, "In my opinion it was not bad judgment for the Consolidated Gas Company to retain the 14th and 42nd Street coal-gas plants. The evidence submitted would tend to show that there is a real danger of a shortage of gas oil, in which event the complainant company will find itself compelled to look to the coal-gas plants, and if these plants had been discarded, other plant capacity would have been required." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that the 14th and 42nd Street coal-gas plants have not been and are not reasonably useful and necessary as coal-gas plants for the manufacture of gas for the complainant company. That while it was not bad judgment for the complainant company to retain such plants, situated as they are upon increasing valuable real estate on the water front of the great City of New York, if they are retained solely as a real estate speculation, yet their judgment in this regard does not and cannot affect the fact that these plants are totally unfit for use as reserve plants, antiquated, inefficient and expensive to maintain and operate, and should not be considered part of the gas manufacturing equipment of the complainant company. The Master should further have found that there is no real danger of a shortage in gas oil, but that with the ending of the war, numerous oil fields theretofore unavailable are now available, and that there is less danger of a shortage in gas-oil

at the present time than there has been at any time within the past five years. The Master should further have found that the best evidence as to the possibility of a shortage of gas-oil is found in the fact that the complainant company alleges that it is about to construct at a cost of over four million dollars ($4,000,000) a plant which will manufacture water-gas and necessitate the use of larger quantities of gas-oil than have ever been used theretofore, which the complainant company would not contemplate if it really believed that there were real danger of a shortage of gas-oil. The Master should further have found that, even if such a shortage in gas-oil were imminent, the negligible quantity of gas which can be manufactured at the 11th and 12nd Street plants and the prohibitive cost thereof, makes it evidence that these plants would not materially help in such a situation. The Master should further have found that if such a shortage in gas-oil were imminent, complainant company should have built a coke oven plant to take care of such a situation in an economical and efficient manner.

Twenty-fourth. The defendants except to the statement or finding on pages 40 and 41, folios 120 and 121 of the printed opinion, that, "The books themselves are kept in conformity with the rules and regulations of the Public Service Commission for the First District, which has regulatory powers over the plaintiff company under the Public Service Law of the State of New York." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that neither the books of the complainant company, nor the books of the Astoria Company were kept in conformity with the rules and regulations of the Public Service Commission for the First District. The Master should further have found that the rules and regulations of the said Public Service Commission for the First District, relating as they do only to the manner and method of keeping the accounts of the companies under the control of the said Public Service Commission for the First District, the fact that in some particulars the books of the complainant company and of the Astoria were kept in conformity with such rules and regulations, is not and cannot be of any probative value as to the accuracy of the books in question.

Twenty-fifth. The defendants except to the statement or finding on page 41, folio 121 of the printed opinion, that: "I was convinced that these books accurately reflected the operations of the complainant company and the Astoria Company." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Twenty-sixth. The defendants except to the statement or

finding on page 41, folios 121 and 122 of the printed opinion, that, "The defendants were afforded the fullest opportunity of not alone examining these books in advance of their being offered, but after they were offered the defendants were afforded the opportunity of examining all the underlying data, vouchers, reports, receipts and other papers that might bear upon the accuracy of these books." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Twenty-seventh. The defendants except to the statement or finding on page 41, folio 122 of the printed opinion, that "Taken in conjunction with the testimony of Mr. Woods and of Mr. Little, as to the character and quantities of materials and labor necessarily used in the manufacture of gas, I think that the record shows beyond question just what, in the actual operation of gas plants, is required for the making of gas and the cost thereof." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Twenty-eighth. The defendants except to the statement or finding on page 41, folio 123 of the printed opinion, that, "Suffice to say that the books of the complainant company show that, excluding gas storage expense, the actual cost of making water-gas at its 21st and 99th Street plants in the year 1918, was 12.66 cents per thousand cubic feet of gas made, and for the eight months of 1919 it was 48.43 cents." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it; and on the further ground that the only evidence in the case to sustain said finding are the books of the complainant company, which were improperly admitted in evidence and the copies and tabulations thereof made by the witness Teele, which were also improperly admitted in evidence, and as to which books and tabulations no proper cross-examination was allowed by the defendants herein.

Twenty-ninth. The defendants except to the statement or finding on pages 41 and 42, folios 123 and 124 of the printed opinion, that—"The Astoria records show that for the year ending December 31, 1918, the actual cost of making water-gas in Astoria was 10.51 cents and for the eight months ending in August, 1919, was 15.75 cents." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. And on the further ground that the only evidence in the case to sustain said finding are the books of the complainant company which were improperly admitted in evidence and the copies and tabulations thereof made by the witness Teele which were also improperly admitted in evidence, and as to which books and tab-

ulations no proper cross-examination was allowed the defendants herein.

Thirtieth. The defendants except to the statement or finding on page 42, folio 124 of the printed opinion, that—"Mr. Woods figured the cost of water-gas in the month of October, 1919, at 47.07 cents." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. And on the further ground that the said witness Woods was not allowed to testify as to prices of materials, nor was any cross-examination allowed to the defendants of the said witness Woods as to such prices, so that there is no competent testimony in the record by the witness Woods as to the cost of water-gas in the month of October, 1919.

Thirty-first. The defendants except to the statement or finding on page 42, folio 124 of the printed opinion, that—"In some instances his cost of materials was somewhat higher than the average cost to the companies as appearing from the books for 1918 and 1919, and in some instances he estimated a somewhat larger quantity than actual operations showed was used." On the ground that the same does not fully state the inaccuracy and unreliability of the witness Woods in this regard. The Master should have found that in all instances Mr. Woods' cost of material was much higher than the average cost to the companies as appearing from the books for 1918 and 1919, and in all instances Mr. Woods estimated a much larger quantity than actual operation showed were used through the years 1906 to 1919, and that in all instances his prices obtained for residuals was much lower than the prices actually obtained by the complainant company, and his estimates of the quantities of residuals obtainable was much lower than the quantities of such residuals actually obtained through the years from 1909 to 1919. The Master should further have found that Mr. Woods' testimony in this regard was so plainly distorted and so plainly the result of bias and interest, that it must be entirely disregarded.

Thirty-second. The defendants except to the statement or finding on page 42, folio 125 of the printed opinion, that—"The safest basis upon which to work was the actual result of operations in the Astoria plant for the eight months ending August 31, 1919." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it, and on the further ground that the period taken by the Master as the "safest basis upon which to work" is an improper, unusual, abnormal and unjust period, being as it is only part of an abnormal year, and containing as it does all of the Spring and Summer months when the amount of gas manufactured is small and the cost consequently

high, and excluding the Fall and early Winter months when the manufacture of gas is large and the cost consequently low.

Thirty-third. The defendants except to the statement or finding on page 42, folio 125 of the printed opinion, that the Astoria plant is "a most efficient plant." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Thirty-fourth. The defendants except to the statement or finding on page 42, folios 125 and 126, of the printed opinion, that—"On a basis of the prices and cost during that period of 1919, the actual cost of making coal-gas, excluding storage, was 47.31 cents. The actual cost of making water-gas was 45.75 cents. On the basis of the quantities produced the cost per thousand cubic feet of mixed gas was 46.10 cents per thousand cubic feet, and on the basis of 78 per cent. water-gas and 22 per cent. coal-gas prevailing in the gas sales of the complainant as of September, 1919, the cost was at least 46.09 cents per thousand cubic feet of gas made." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Thirty-fifth. The defendants except to the statement or finding on page 43, folio 127, of the printed opinion that—"To my mind it is impossible for anyone seriously to dispute that figure. I have therefore found as a fact that the cost of making gas at this time is not less than 46.09 cents plus 1 cent storage expense, making 47.09 cents for gas made. That was the average cost for eight months in 1919." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support.

Thirty-sixth. The defendants except to the statement or finding on page 43, folio 127, of the printed opinion that—"Since that time the price of oil has gone up. The price of coal has gone up. The price of labor is constantly going up." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Thirty-seventh. The defendants except to the statement or finding on page 43, folios 127 and 128, of the printed opinion that—"I have avoided basing any conclusions on fragmentary or incomplete data of operations." On the ground that the same is not supported by the evidence is contrary to the evidence and that there is no evidence tending to support it.

Thirty-eighth. The defendants except to the statement or finding on page 43, folio 128, of the printed opinion that—"It is beyond the shadow of a doubt that the materials and labor going into the manufacture of coal and water-gas today, making allowance for the residuels produced, cost the complainant company, no matter how or where the gas is made, at least

47.09 cents per thousand cubic feet." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Thirty-ninth: The defendants except to the statement or finding on page 43, folio 129 of the printed opinion that— "After listening to the testimony given by Mr. Woods and by the defendants' expert, Mr. Little, and after analyzing the various reports of the various companies and the experiences of various companies, and the explanations of Mr. Woods and the statements of Mr. Little with reference to it in this and other cases, I am satisfied that 7 per cent. of the gas made must be figured as unaccounted for gas." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that the evidence shows that each gas company must necessarily have a different amount of unaccounted for gas dependent upon the volume of consumption per mile of main, variations in temperature and other matters which are different in each locality and with each company, and that the only basis for judgment in the present case is the actual experience of the complainant company and its allied companies. The Master should further have found that it appears from the records in this case that Consolidated System as a whole including the Consolidated Gas Company and its allied companies never had as high and unaccounted for gas as 7 per cent. except in the extraordinary severe winters of 1917 and 1918. The Master should further have found that the present system of assigning gas unaccounted for to various companies entirely speculative, and there is no basis therefor. The Master should further have found that the average gas unaccounted for for the entire system for the years 1906 to 1916 was 4.9 per cent, and for the years 1906 to 1918 was 5.31 per cent; that the average reported gas unaccounted for for the Consolidated Gas Company for the year 1906 to 1916 was 3.6 per cent; and for the years 1906 to 1918 was 4.08 per cent (see Exhibits AA 122, AA 125). The Master should further have found that the testimony shows that the Consolidated Gas Company has a consumption per mile of main twice as great as that of any other company in the system, with the exception of the Central Union Company, and 15 per cent higher than that Company (see folio 16, 994). The Master should further have found that the evidence shows that "With very dense consumers you would have a very much smaller percentage of gas lost than on sparsely settled with long mains." (See witness Woods' folio 16, 989). The Master should further have found that 4 per cent more than a reasonable allowance for gas unaccounted for in this case.

Fortieth: The defendants except to the statement or finding on page 44, folio 130 of the printed opinion that— "Upon this

basis, therefore, the gas sold represents 93 per cent of the gas made. The gas made costing 47.09 cents per thousand cubic feet therefore represents, in my judgment, beyond any doubt, at least 50.63 cents per thousand cubic feet for gas sold." On the ground that the same is not supported by the evidence is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that the gas sold represents at least 96 per cent of the gas made. The Master should further have found that the figure for gas sold corresponding to the unproven figure of 47.09 cents per thousand cubic feet of gas made would be 49.05 cents per thousand cubic feet of gas sold.

Forty-first: The defendants except to the statement or finding on page 44, folio 131 of the printed opinion that— "I am inclined to believe that he (counsel for complainant) accurately states the figures (as to cost of gas made) upon the basis of actual prices paid in October, 1919, and upon some proof in the record as to contracts since made for oil." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Forty-second: The defendants except to the statement or finding on page 44, folio 131 of the printed opinion— "The cost today is substantially higher than it was during the first eight months of 1919." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Forty-third: The defendants except to the statement or finding on page 45, folio 133 of the printed opinion that there is "the possibility staring it in the face of not being able to sell the greatly increased quantities of coke which would be produced as a result of such methods of manufacture; for it is conceded that unless Mr. Little's judgment is right as to the ability to sell coke, his plans must be disregarded." On the ground that the same is not supported by the evidence is contrary to the evidence, and that there is no evidence tending to support it.

Forty-fourth: The defendants except to the statement or finding on page 45, folio 134 of the printed opinion that— "Mr. Little, on cross-examination, admitted that he would not advise the complainant's executives to undertake the installation of a plant of this character ——— under the conditions prevailing for several years." On the ground that the same is not supported by the evidence is contrary to the evidence, and that there is no evidence tending to support it.

Forty-fifth: The defendants except to the statement or finding on page 45, folios 133 and 134 of the printed opinion that— "Moreover, for several years the complainant company and the Astoria Company have experienced great difficulty in obtaining

the quantity of bituminous coal required for their present mode of making coal-gas. They have received only about sixty per cent of the quantity desired and contracted for by them. During the past winter, and at other times previously, the generation of coal-gas in the Astoria plant has had to be curtailed because of the inability to obtain coal." On the ground that the same is not supported by the evidence is contrary to the evidence, and that there is no evidence tending to support it.

Forty-sixth: The defendants except to the statement or finding on page 46, folios 136 and 137 of the printed opinion that—"Another item which must be added to the cost of gas sold is the expense of maintaining the Astoria Tunnel. As I have already pointed out the complainant company was practically forced to go to Lond Island City to make its gas, and is therefore compelled to use a tunnel to convey gas to Manhattan. That tunnel is under water, requires a great deal of care and attention and constant repairs, with the necessary materials and labor. Based on the charge made by the Astoria Company for the year 1919, the cost of maintaining the tunnel is one cent per thousand cubic feet sold." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that the said tunnel is under the bed of the East River, is subject to very slight interruption or accident that the number of employees engaged in the maintenance thereof is negligible and the cost of such maintenance is not $190,000, as now found by the Master, but is not in excess of $30,000 per year, which on the basis taken by the Master would not exceed .15 of a cent per thousand cubic feet of gas sold.

Forty-seventh. The defendants except to the statement or finding on page 46, folio 138 of the printed opinion that "The record shows for the year 1918 taxes assessed against the complainant company were as follows:

New York State Gross Earnings tax	$78,473.86
New York City Special Franchise tax	384,297.90
New York City Real Estate of Corporations tax	155,122.20
New York City Real Estate tax	462,171.55
New York City Personal tax	23,300.00
United States Capital Stock tax	24,807.38

On the ground that the same is not supported by the evidence is contrary to the evidence, and that there is no evidence tending to support it.

Forty-eighth. The defendants except to the statement or finding on page 47, folio 139 of the printed opinion that "For the same year the Astoria Company had the following taxes assessed against it:

Real Estate	$345,953.30
Gross Earnings	31,516.10
Personal	11,157.41
Capital Stock	8,541.50
Excess Dividends over 4 per cent	6,000.00
Special Franchises	321.73
Federal Income	192,594.01"

On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Forty-ninth. The defendants except to the statement or finding on page 47, folios 140 and 141 of the printed opinion that "the following items (are) to be taken as taxes assessed for the year 1918 on the entire property:

New York State Gross Earnings tax	$78,473.86
New York City Special Franchise tax	384,297.90
New York City Real Estate of Corporations tax	155,122.20
New York City Real Estate tax on Manhattan properties	462,171.55
New York City Real Estate tax on Astoria property	345,953.30
New York City Personal tax, Manhattan	23,300.00
New York City Personal tax, Astoria property	11,157.41
Astoria Special franchise	321.73
United States Capital Stock tax	24,807.38"
To this must be added the tax on Astoria tunnel of	123,022.59
Making a total of taxes assessed, taking the year 1918 as the basis, of	$1,608,627.92"

On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Fiftieth. The defendants except to the statement or finding on page 48, folio 142 of the printed opinion that "On the other hand, if the complainant be permitted to earn a fair return some tax items may be increased." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Fifty-first. The defendants except to the statement or finding on page 48, folios 142 and 143 of the printed opinion that "On the same basis of 19,000,000,000 cubic feet for 1920, 7.5 cents per thousand cubic feet, gives me $1,425,000 as the tax item instead of $1,608,627.92, making a difference of $183,627.92.

It is impossible, I think, to figure the tax item any closer than I have done. I am convinced that in reaching the figure of 7.5 cents I have fixed a figure which, in all probability, experience will show to be the exact cost—at any rate, so close to it as to be fair to both the public and the complainant company." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that the taxes necessarily paid by complainant amount to not more than five (5) cents per thousand cubic feet of gas sold.

Fifty-second. The defendants except to the statement or finding on page 49, folio 146 of the printed opinion that "The entire cost of distribution in 1918 was 19.78 cents per thousand cubic feet of gas sold; for the first eight months of 1919, 21.10 cents; for the twelve months ended October 31, 1919, 22.09 cents." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Fifty-third. The defendants except to the statement or finding on pages 49 and 50, folios 147 and 148 of the printed opinion that "It is of course true that the Distribution Department has enjoyed no immunity from the effects of the mounting costs of labor and material, and I am inclined to believe that these witnesses, accurately stated a ratio or extent of increase in costs which has taken place in this department since 1918 and early 1919." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Fifty-fourth. The defendants except to the statement or finding on page 50, folios 148 and 149 of the printed opinion that "Clerk hire has gone up; stationery costs more; salaries of other employees have gone up, and on the whole, I believe, if fair allowance be made for all of the items in dispute, that in the business of this complainant company all of the items included under the head of distribution cost cannot possibly be kept below twenty cents per thousand cubic feet, and in reaching my figures, I have taken that figure as the cost of distribution." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that all of the items under the head of distribution cost should not amount to more than sixteen (16) cents per thousand cubic feet of gas sold.

Fifty-fifth. The defendants except to the statement or finding on page 50, folio 149 of the printed opinion that "The cost to-day (of distribution) is substantially higher than it was in 1918 or the first eight months of 1919." On the ground that

the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Fifty-sixth. The defendants except to the statement or finding on page 50, folio 150 of the printed opinion that the "credit arising out of miscellaneous operating revenue, such as rent from gas appliances, profit on the sale of gas appliances, and other items which in 1918 aggregated 7.28 cents per thousand cubic feet and for the first eight months of 1919 showed 6.62 cents. I have taken an average of 6.95 cents as warranted by all the evidence." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Fifty-seventh. The defendants except to the statement or finding on page 51, folios 152 and 153 of the printed opinion that—"As to part of this period, namely, the time during which the United States War Department stripped the gas of the light oils, * * * I find as a fact that the complainant company acted under compulsion in time of war, and that were it not for the action of the United States Government officials and gas would have been in conformity with the statue." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found as to this period that the complainant company voluntarily entered into a contract with the United States Government which provided for the extraction by the said Government, from the gas manufactured by complainant company, of the so-called light oils; that during this period there was furnished to the consumers by the complainant company gas of much lower candle power than that required by statute, and of lower heating value than the gas theretofore furnished, and than gas which filled the requirements of the statute; that the gas so furnished during that period was not in any way as valuable to the consumers as would have been such gas as is prescribed by statute.

Fifty-eighth. The defendants except to the statement or finding on page 51, folio 153 of the printed opinion that—"As to the balance of the time, I am satisfied that the complainant made every effort to comply with the statute." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that—"The uncontradicted evidence shows the following violations of the statute in the period stated:

	1916	1917	1918	1919
January	83	73	240	124
February	70	53	208	67
March	58	45	157	103
April	39	31	129	97
May	22	31	151	36
June	52	88	221	82
July	37	58	260	53
August	42	103	263	55
September	70	69	230	84
October	81	44	260	57
November	73	119	222	42
December	52	101	188	68
Total	682	815	2529	868"

The Master should further have found that the complainant company was violating the statute on the very day on which the complaint in this action was filed.

Fifty-ninth. The defendants except to the statement or finding on page 52, folio 154 of the printed opinion that these violations of the statute "may have been caused by conditions not to be foreseen and it may have been due to the unreliability of the tests made." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Sixtieth. The defendants except to the statement or finding on page 52, folio 154 of the printed opinion that—"I am not at all satisfied that the city inspectors were in all cases correct in their observations. The gas was not tested in the manner which the statute seems to require." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that—the gas was tested by the Inspectors of the Department of Water Supply, Gas & Electricity, pursuant to the provisions of Chapter 537 of the Laws of 1905, and that the apparatus and method of testing used by the said Inspectors of the Department of Water Supply, Gas & Electricity was the standard and approved method of testing gas; that it was teste dby such inspectors by a method inaugurated, perfected and approved by an eminent gas chemist, who later became the chief chemist of the complainant company, and generally considered by students of gas chemistry to be the most accurate method of testing gas, and to be the method best calculated to ascertain the results prescribed by the statute. The Master should further have found that the ob-

servations made of the candle power and the calculations for reducing such candle power to uniform temperature, barometric pressure, rate of burning of the gas tested, and of the candles used to test it, were accomplished in a careful and accurate manner, so carefully and accurately that out of eighty-four thousand calculations made by the said Inspectors and submitted in evidence on the twelve thousand test sheets introduced by the defendants, the complainant's experts alleged only five hundred minor errors in calculation, more than three hundred of which did not affect the reported candle power more than one-tenth of a candle.

Sixty-first. The defendants except to the statement or finding on page 52, folios 154 and 155 of the printed opinion that—"It appears to be conceded that in order to make a twenty-two candle power gas it should be made of a twenty-three and a half candle power at the works. I am satisfied that the gas made by the complainant company was always at least twenty-three and a half candle power." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that no set rule can be laid down for variation in candle power of gas at the works as compared with the same gas at the testing station.

Sixty-second. The defendants except of the statement or finding on page 53, folios 157 and 158 of the printed opinion that—"I have accepted this report of Mr. Hine as being more reliable than the tests produced in evidence, and I therefore have found as a fact that the complainant company has complied with this standard requirement of the statute." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it; and on the further ground that since the said report gives no instances of violation of the statute, nor even the number of such violations observed, that it is valueless as a basis of a finding herein.

Sixty-third. The defendants except to the statement or finding on the pages [illegible] 159 and 160 of the printed opinion that—"In this connection I feel called upon to say that the record in this case discloses the fact that this candle power standard has no place on our statute books. It is agreed by everybody that the 22 candle power requirement is a useless requirement, wasting the money of this company, and of the public. In no other place is this requirement in vogue. Since electricity has come to be used as it has for illuminating purposes, gas is no longer considered an illuminant but is used for heating rather than for lighting purposes. The important quality of gas therefore is its heating power, not its illuminating power. The time has come (in fact had arrived many years ago) when

this statute should be repealed and the matter left with the Public Service Commission to determine the heating quality of the gas to be furnished to consumers. It will cost less to make a gas of a heating quality accepted in most jurisdictions than it does to make a 22 candle power gas, and the quicker the standard is changed the sooner will the public be able to get gas at a price less than must necessarily be charged at this time for 22 candle power standard if a reasonable return is to be allowed the complainant company." On the ground that it is not supported by the evidence and has no place in the report of opinion herein, being as it is a gratuitous slur upon the Legislative branch of the Government and evidencing the Master's uncontrollable prejudice against the statute which is the subject of this litigation, which prejudice has totally disqualified him to pass fair judgment upon the issues raised herein.

Sixty-Fourth. The defendants except to the statement or finding on page 55, folio 163 of the printed opinion that "The cost of constructing this (general office) building compared with present conditions was very modest." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Sixty-Fifth. The defendants except to the statement or finding on page 65, folio 164 of the printed opinion that— "I have given this matter a good deal of thought and I believe that the fairest way of handling the situation is the way it has been handled by the complainant company." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that of the space claimed to be occupied by the complainant company in the said 15th Street office building, not less than seventy-seven thousand square feet is not used by the complainant company in its gas business but is used, in whole or in part, by other companies or by employees of the complainant company who are doing work for other companies; that the said seventy-seven thousand square feet could readily be rented for One hundred and fifteen thousand dollars ($115,000.00), a large proportion of which amount should be charged to the complainant company.

Sixty-Sixth. The defendants except to the statement or finding on page 55, folio 164 of the printed opinion that— "The net cost to the complainant for office space in less than it would have to pay if it rented space in a building owned by some one else. I see no ground for disturbing the figures of the complainant company with regard to the 15th Street building." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Sixty-Seventh. The defendants except to the Master's find-

ing as to the 57th Street office building on pages 55 and 56, folios 165 and 166 of the printed opinion that— "I believe the officers of the complainant company reached the conclusion they did in good faith and that the cost to the consumer is no more than it would be if the company had hired office space in a building not owned by them in that neighborhood. I have declined therefore to interfere with the judgment of the officers of the complainant company in that regard." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that it affirmatively appeared that the complainant company could obtain equal space of equal value to the company on another street for at least One hundred thousand dollars ($100,000.00) less than the price paid at this location, and that space of equal value could have been rented, and can today be so rented, at a much smaller price than the cost of operation and maintenance of this ornate and expensive building and at a saving of at least Thirty-five thousand dollars ($35,000.00) a year.

Sixty-Eighth. The defendants except to the statement or finding on page 56, folios 166 and 167 of the printed opinion, as to parcels of property claimed by the defendants not to be used and useful that— "If these parcels were all thrown out of calculation it would make no material difference in the net result." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Sixty-Ninth. The defendants except to the statement or finding on page 56, folio 167 of the printed opinion as to such parcels of property claimed by the defendants not to be used and useful that— "There is evidence supporting the contention of the complainant company, and I decline to substitute my judgment for the judgment of the operating officials of the complainant company." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that the judgment of the operating officials of the company was not reliable or the basis of a finding in this case but was the result of bias and was warped by selfish interest and that the defendants' Exhibits AA 126 and AA 303 correctly show, by lot and block, the part of the property used and useful in the complainants' gas business in the years from 1906 to 1918, inclusive, and defendants' Exhibit AA 466 shows the fair value of complainant's property in the gas business from 1906 to 1918 inclusive.

Seventieth. The defendants except to the statement or conclusion of law on page 56, folios 167 and 168 of the printed opinion that— "The United States Supreme Court in deciding

the suit brought by this company in 1906 (Willcox v. Consolidated Gas Co., 212 U. S. 19) rather indicated that 6 per cent. was then a fair return on the value of the property used in complainant's gas business." On the ground that this is not a correct interpretation of said decision which held directly and conclusively that under the circumstances attending the operations of this company, which has a monopoly of the lighting business in the greatest city in the world, that no more than six per cent. return would be proper.

Seventy-First. The defendants except to the statement or finding on pages 56 and 57, folios 168 and 169 of the printed opinion that— "Since the decision of the prior suit in 1909, there has been a very radical change in business conditions. The investment market of the world is on an entirely different basis than that under consideration by the Court in 1909. Taking into consideration all of the factors which the Courts have indicated as entering into the determination of a reasonable and proper rate of return upon capital employed in supplying gas to the public, I am of the opinion that this complainant company is entitled to receive a return of at least eight (8%) per cent on the value of the property used in its gas business." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Seventy-Second. The defendants except to the Master's statement or finding on page 59, folios 175 and 176 of the printed opinion, as to the so-called Anthracite Franchise that— "but since then (1913) the complainant company has maintained its pipes and mains in the streets, and, so far as the record shows, has relaid pipes and mains where necessary; no action has been taken by the City of New York to disturb the complainant's rights in the streets, and, so far as the record indicates, the City of New York still acquiesces in the complainant's rights therein. So long as the complainant is enjoying possession of the rights granted and is not disturbed, I think that for the purpose of this case the right must be deemed to be existent as if it had been extended or renewed by formal resolution, and that it must still be included as one of the franchises for which a value of $7,781,000 was fixed in 1884." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that the right of the complainant company, under the so-called Anthracite franchise, to lay mains in the streets of the City of New York expired in 1913, that since that time this complainant company has had no right either under that franchise or any other franchise, to lay mains in or dig into the streets of the City of New York, and that any acts upon the part of the corporation since

the year 1913 in laying mains in or digging into the streets of the City of New York have been not by virtue of any franchise, but in derogation of the terms of franchises claimed by the complainant company, and that their occupancy of the streets is that of a trespasser on sufferance only, and that in view of these facts there is and can be no value to the corporation of these so-called franchises.

Seventy-third. The defendants except to the statement or finding on page 60, folio 178 of the printed opinion, to the effect that the present value of the land of complainant company is $11,970,185. On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that the assessed value of the land used and useful in its gas business is not more than $5,270,687, and that the actual cost of the same was not more than $2,000,000.

Seventy-fourth. The defendants except to the statement or finding on page 60, folios 178 and 179 of the printed opinion, to the effect that the complainant company showed or proved "the inventories and appraisals made of its properties in 1906 for the prior suit, the unit prices applied then to the properties inventoried, and the extent to which the properties than inventoried are now in existence and use by the complainant." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it; and on the further ground that the evidence submitted on this question was incompetent, irrelevant, immaterial, incomplete and not the basis for a finding herein.

Seventy-fifth. The defendants except to the statement or finding on page 60, folio 179 of the printed opinion, that "Proof was then offered showing that the present unit prices for such materials, labor, and the like, are substantially higher than those used in 1906." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Seventy-sixth. The defendants except to the statement or finding on page 60, folios 179 and 180 of the printed opinion that, "I have no doubt that the present reproduction cost would be at least as much as the sum thus arrived at." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Seventy-seventh. The defendants except to the statement or finding on page 61, folio 181 of the printed opinion, that "For several years past the cost of labor and materials has been such that to reproduce the property of the complainant company, even with allowance for any deferred repairs and maintenance and deferred renewals and replacements of property, some-

times referred to as 'observed depreciation,' would cost very much more than the actual investment of the complainant company in these properties." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Seventy-eighth. The defendants except to the statement or finding on page 61, folio 181 of the printed opinion, that, "As far back as 1886, Mr. Edgerton figures a water-gas plant worth about $150 per thousand cubic foot capacity, and a coal-gas plant at some $225." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Seventy-ninth. The defendants except to the statement or finding on page 61, folios 181 and 182 of the printed opinion, that, "Apparently engineers through the years have figured a water-gas plant, excluding land, as worth about $150 per thousand feet of daily capacity, and a coal-gas plant about twice as much." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Eightieth. The defendants except to the statement or finding on page 61, folio 182 of the printed opinion, that, "The testimony in this case was to the effect that a coal-gas plant now costs from two to three times as much as a water-gas plant. Several times as much land is required for a coal-gas plant as for a water-gas plant." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Eighty-first. The defendants except to the statement or finding on page 61, folio 182 of the printed opinion, that "Mr. Woods, the engineer of the defendant company, figuring the value of the New York Mutual plant for the purpose of intercompany adjustments long before the question came before me, fixed the value of the New York Mutual plant on Manhattan Island, including land, at $205.72½ per thousand cubic feet." On the ground that the same is not supported by the evidence is contrary to the evidence, and that there is no evidence tending to support it; and on the further ground that it affirmatively appears that the witness Woods never made an inventory or appraisal of the plant of the New York Mutal Company, but relied entirely upon the book figures of that company, which book figures are by no means proved to have been accurate.

Eighty-second. The defendants except to the statement or finding on pages 61 and 62, folios 183 and 184 of the printed opinion, that "The actual investment of the Astoria Company, exclusive of working capital, is in excess of $15,460,000. Included in this is about $3,300,000, representing the original cost

of the land (plus grading and filling) and of the construction of docks, wharves and the plant railroad, leaving as the actual original cost of building the Astoria gas plant, long prior to the world war, about $12,160,000, exclusive of land." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Eighty-third. The defendants except to the statement or finding on page 62, folio 184 of the printed opinion, that "This sum represents about $375 per thousand cubic feet of capacity for coal-gas units and about $150 per thousand cubic feet of capacity for coal-gas units and about $150 per thousand cubic feet of capacity for the water-gas units. That is to say, taking 20,000,000 daily capacity for the coal-gas at $375 per thousand cubic feet, we get $7,500,000, and taking 30,000,000 cubic feet at $150 we get $4,500,000, making a total of $12,000,000, exclusive of land, the additional amount of $160,000 being for facilities which would be useful for contemplated extensions to the plant." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it; and on the further ground that it affirmatively appears a much larger sum than $160,000 was invested at Astoria in facilities which would be useful for contemplated extensions to the plant, and that in fact such a large amount has been expended for such facilities that are not reasonably useful or necessary now that it is the testimony of complainant's witnesses that the contemplated new unit at Astoria, which is expected to cost $4,500,000, would cost at least $2,000,000 more if built anywhere but at Astoria.

Eighty-fourth. The defendants except to the statement or finding on page 62, folios 184 and 185, of the printed opinion that "The 99th and 21st Street water-gas plants, exclusive of land, represent about $172 per thousand cubic feet of capacity." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Eighty-fifth. The defendants except to the statement or finding on page 62, folio 185, of the printed opinion that "The investment in the 14th and 42d Street coal-gas plants, exclusive of land, amounts to about $356 per thousand cubic feet of capacity. Compared with the Astoria coal-gas units, the relatively smaller capacity of these plants tends to a higher unit cost per unit of capacity, which, however, is more than offset by the greater investment in labor-saving equipment at the Astoria plant." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Eighty-sixth. The defendants except to the statement or finding of page 62, folio 186, of the printed opinion that "In other words, the original investment in the complainant's plants is not in excess of what such plants cost before the war." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Eighty-seventh. The defendants except to the statement or finding on page 62, folio 186, of the printed opinion that "The total investment in the plant and property, including that for which stock was originally issued, but exclusive of franchise rights and working capital, after making a deduction for what is described as 'jointly used property' owned by the complainant, is $38,675,393.99." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Eighty-Eighth. The defendants except to the statement or finding on pages 62 and 63, folios 186 and 187, of the printed opinion that "The fact is, that figured in various ways, $4 fairly represents the value of necessary manufacturing and distributing plant for one thousand cubic feet of gas sold." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Eighty-ninth. The defendants except to the statement or finding on page 63, folios 187 and 189, of the printed opinion that "I am convinced that no matter how depreciation is figured on the cost of reproducing this property, and no matter what criticism be made as to the age of the 14th and 42d Street plants, the fact remains that those plants are going, gas-producing plants, and that the 21st Street and 39th Street plants are gas-producing plants, and based entirely upon the capacity of the plants alone, plus the extent of the street mains, services, and other property, by no possibility could this property be reproduced, less depreciation, on any theory, for $38,675,393.99, made up as follows:

Real estate (including $3,119,634.26 for General Office Building)	$10,647,062.94
Manufacturing plants and holder stations	13,119,754.76
Services	1,272,241.74
Street mains	11,027,266.24
Meters	3,719,442.12
Cocks and connections	359,322.12
Furniture and fixtures	532,437.54
Horses, wagons and harness	5,747.80
Tools and implements	149,335.26
Scows	15,821.20

Gas appliances rented	1,711,935.46
Automobiles and accessories	137,412.82
	$42,697,780.00
Less portion of General Office Building and other property owned by complainant but jointly used by others	4,022,386.01
Total	$38,675,393.99"

On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that the 14th and 42d Street plants are producing gas only for the purposes of this case and to gouge the consumer. The Master should further have found that the actual value of the property of the complainant company, used and useful in the gas business, including the General Office Building is not more than $25,000,000.

Ninetieth. The defendants except to the conclusion of the Master found on page 64, folio 190, of the printed opinion that "In arriving at the value of the property necessarily used in the gas business of the complainant company, I have rejected the testimony and suggestions of the witnesses for the defendants that I ought to take the investment in the property, less a large amount for 'theoretical depreciation.'" On the ground that there is no warrant in authority for disregarding depreciation and that the Master has fallen into grevious and fatal error in disegarding such depreciation.

Ninety-first. The defendants except to the statement, finding or conclusion of the Master found on page 64, folio 191, of the printed opinion that "I cannot escape the view that a property used for the service of the public in the operation of a finding on page 64, folio 192, of the printed opinion that "Start-condition, must, in the nature of things, be worth to the public at least the amount honestly and reasonably put into the property. Nor can I escape the conclusion that any other method of arriving at the value of the property used in the public service must tend to unfairness, either to the consuming public or to the investors in the public utility corporation." On the grounds that the same has no warrant in authority, is contrary to law and is grievous and fatal error.

Ninety-second. The defendants except to the statement or finding on page 64, folio 192, of the printed opinion that "Starting with the value of the property as fixed and agreed upon in 1884 and the issuance of stock at par upon that basis, and adding to that sum the amounts expended from time to time in installing new apparatus and facilities in existing plants and constructing new plants and facilities, and then deducting

therefrom the cost of the property withdrawn from service since 1884, there is actually and reasonably invested in property used in the gas business of the complainant no less than $71,054,351.14, exclusive of mobile or floating assets, commonly called working capital." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that the value of the property of complainant company used and useful in the gas business is not more than $25,000,000.

Ninety-third. The defendants except to the statement or finding on pages 64 and 65, folios 192 and 193 of the printed opinion that—"The plant machinery and equipment used in the gas business of the complainant company has been and is maintained in excellent operating condition; proper repairs, renewals and replacements have been made from time to time, and the same are now in as high a state of efficiency as if new." On the ground that the same is not supported by the evidence, is contrary to the evidence, and there is no evidence tending to support it.

Ninety-fourth. The defendants except to the statement or finding on page 65, folio 193 of the printed opinion that—"From every point of view which concerns or affects the consumers, the property for which this $71,054,351.14 was paid is rendering the same service today, and in some instances a little better service, than was contemplated or secured at the time the money was put in." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Ninety-fifth. The defendants except to the statement or finding on page 65, folios 193 and 194 of the printed opinion that—"Counsel for the defendants insistently urge that all return must now be withheld from a large part of that investment, and the amount of investment arbitrarily reduced, merely because some of the plants or some of the property in them have been in existence for some years." On the ground that this is not a correct or fair interpretation of the contention of the defendants. The defendants contend, in consonance with authority, and the Master should have found that from the value of the property found must be deducted an amount for depreciation based upon the length of time the various items of property have been in use, their consequent expectency of life and the probability of their necessary replacement.

Ninety-sixth. The defendants except to the statement or finding on page 65 and 66, folios 195 and 196 of the printed opinion that—"If the complainant urged the present reproduction cost basis and I adopted that view, * * * I would find myself compelled to fix the value of the property at this time at a sum largely in excess of the actual investment as above found." On the ground that the same is not supported by the

evidence, is contrary to the evidence, and that there is no evidence tending to support it.

Ninety-seventh. The defendants except to the statement or finding on page 67, folio 199 of the printed opinion that—"The proof indicates that what some persons still refer to as abnormal time has become to others a high, new, normal level, which will continue for a comparatively long time to come." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence to support it.

Ninety-eighth. The defendants except to the statement or finding on page 67, folio 200 of the printed opinion that—"Where counsel for the defendants err in urging upon me the view that the price of gas should not be changed under present conditions, is in their failure to differentiate between the basis of valuing the property on which a return is to be allowed, and the basis of determining the actual cost of making and delivering the gas." On the ground that this is an inaccurate and unfair statement of the attitude of defendants' counsel. Defendants contend and the Master should have found that in view of all the conditions surrounding this case and of the allegations of the complaint and of the proof herein submitted, the only proper basis for a finding as to cost of production and distributing gas and as to the value of the property from time to time used and useful in the gas business, is the experience of the company from 1906 to 1918 inclusive.

Ninety-ninth. The defendants except to the statement or finding on page 67, folio 201 of the printed opinion, to the effect that—"No such situation, (i. e. a temporary increase in the cost of production) is, however, presented here." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

One-hundredth. The defendants except to the statement or finding on pages 67 and 68, folios 201 and 202 of the printed opinion that—"On the basis of the prices, rates of pay, and costs prevailing during the eight months beginning January 1, 1919, the cost of making and distributing gas has been such as to allow a very small, if any return, on even the actual investment; and since September 1, 1919, the cost of making and distributing gas has been increased in a number of respects so that the fair inference is that the complainant company now finds itself without any return upon the investment. The conditions found by me have existed for more than a year last past, and to a lesser degree for at least a year before that time, and will continue for at least a considerable period of time, the end of which cannot now be forecast." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

One Hundred and First. The defendants except to the statement or finding, or conclusion found on page 68, folio 202 of the printed opinion that " The complainant company has shown itself, clearly and beyond all reasonable doubt, entitled to relief from the statutory limitation on its rates." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it; and on the further ground that there is no warrant in authority for such a conclusion but that the same is grievous and fatal error, lightly recommending the annulment and avoidance of a statute solemnly enacted by the representatives of the sovereign people of the State of New York.

One Hundred and Second. The defendants except to the statement or finding on page 69, folio 205 of the printed opinion that " There apparently was actually invested in the construction of the Astoria plant as of December 31, 1918, $17,169,342.57 and in the tunnel $5,178,614.58." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

One Hundred and Third. The defendants except to the statement or finding on page 69, folios 205 and 206 of the printed opinion that " In order to meet the requirements of the public it is necessary to have additional capacity. We must either add to the invested capital the amount that Mr. Woods figures for part of the mutual plant capacity or make allowance for the additional plant capacity at Astoria. As I have disregarded all of the plants except the Consolidated Plants on Manhattan Island and the Astoria plant for the purpose of reaching a conclusion in this case, I believe that there should be added to the invested capital one-half of the expense of the new 30,000,000-foot plant at Astoria, which will cost $4,500,000, half thereof being $2,250,000. Adding these three items of Astoria plant, Astoria tunnel and half of the additional 30,000,000 cubic feet to the item of $38,675,393.99 for property other than franchises and rights and $7,781,000 for franchises and rights, gives a figure of $71,054,351.14." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

One Hundred and Fourth. The defendants except to the statement or finding on page 70, folio 208 of the printed opinion that " Mr. Little indicated that in his judgment working capital should represent about twenty cents per thousand cubic feet." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it. The Master should have found that the testimony of Mr. Little on the subject of working capital had no reference to the complainant company, that he expressly disclaimed having investigated the needs of the complainant

company and that the said testimony is not the basis of a finding herein.

One Hundred and Fifth. The defendants except to the statement or finding on page 70, folio 208 of the printed opinion that "For the purpose of determining the amount of working capital I have accepted Mr. Little's figure, which makes the working capital on the basis of 19,000,000,000 feet of sales as nearly as may be determined $3,800,000, making a total therefore of invested capital of $74,854,351.14 upon which the complainant is entitled to a fair return." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it.

One Hundred and Sixth. The defendants except to the statement or finding, or conclusion of law on page 70, folio 210 of the printed opinion that "The property of the complainant company is being confiscated to a very substantial extent. Every day that this continues, assuming the correctness of my conclusions, is an injustice to this complainant company." On the ground that the same is not supported by the evidence, is contrary to the evidence, and that there is no evidence tending to support it; and on the further ground that there is no warrant in authority therefor.

Respectfully submitted,

WILBER W. CHAMBERS,
Solicitor for the Defendant Newton,
Office & P. O. Address,
Capitol, Albany, N. Y.

TERENCE FARLEY,
Solicitor for the Defendant Nixon,
Office & P. O. Address,
49 Lafayette Street,
New York City.

JOHN P. O'BRIEN,
Solicitor for the Defendant Swann,
Office & P. O. Address,
Municipal Building,
New York City.

Affidavit and Order for Final Hearing.

District Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
CHARLES D. NEWTON, as Attorney-General of the State of New York, and Others, Defendants.

On reading and filing the affidavit of Wilber W. Chambers, verified the 26th day of May, 1920, and on the exceptions filed

by the defendants to the report of the Special Master Abraham S. Gilbert, Esq., filed with the Clerk of this Court on May 6, 1920, and on all the pleadings and proceedings had herein, it is

Ordered, that the complainant company show cause before this Court to be held by Hon. John C. Knox, United States District Judge, on the first day of June, 1920, at 2:30 o'clock in the afternoon of that day, or as soon thereafter as counsel can be heard, at the Court House, Room No. 235 in the Post Office Building, in the Borough of Manhattan, New York City, why an order should not be made herein sustaining the exceptions filed by the defendants to the said Special Master's report, and why the trial before the Master should not be declared null and void and this cause retried before the court, or in the alternative why the said exceptions should not be sustained and the complaint dismissed and judgment given accordingly to the defendants, and for such other and further relief as to the Court may seem just and proper in the premises.

Sufficient reason appearing therefor, service of a copy of this order at least five days before the date hereinbefore mentioned upon Messrs. Shearman & Sterling, socilitors for the complainant, be deemed sufficient service.

Dated, New York, May 26th, 1920.

J. C. KNOX,
United States District Judge.

District Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
CHARLES D. NEWTON, as Attorney-General of the State of New York, and Others, Defendants.

UNITED STATES OF AMERICA, *Southern District of New York.*
State of New York, City and County of New York, ss.:

Wilber W. Chambers, being duly sworn, says:

I am a solicitor for the defendant Newton and have the care and charge of this case for him. All of the defendants have joined in the exceptions to the report of the Special Master Abraham S. Gilbert, which was filed with the clerk of this court on or about the 6th day of May, 1920. These exceptions were filed with the clerk of this court on May 26th, 1920. At the close of complainant's case, and at the close of the whole case, the defendants made the following motion for a dismissal of the complaint, which was denied by the Special Master:

"*Mr. Chambers*—The defendants move to dismiss the bill of complaint herein on the complainant's evidence on the grounds—

"*First*—That complainant has failed to establish facts sufficient to constitute a cause of action.

"*Second*—That complainant has failed to establish any cause of action.

"*Third*—That complainant has failed to show that chapter 125 of the Laws of 1906 insofar as it establishes a rate to be charged for gas in the City of New York at eighty cents per thousand cubic feet is confiscatory in that it does not allow a fair return on the capital invested in the business of making and distributing gas.

"*Fourth*—That complainant has failed to prove what it cost to make and distribute gas to its consumers.

"*Fifth*—That complainant has failed to prove the amount of capital actually invested in making and distributing gas upon which it would be entitled to a return.

"*Sixth*—That complainant has not shown nor does it claim that it cannot earn and does not earn sufficient to pay seven per cent. in dividends on its entire capital stock, although a large part of this capital stocks is invested in the stocks, bonds or obligations of other companies.

"*Seventh*—That complainant has failed to establish beyond a reasonable doubt that chapter 125 of the laws of 1906 is unconstitutional.

"*Eighth*—That complainant has failed to establish that it has complied with all of the provisions of said chapter 125 of the laws of 1906 and has furnished to the public gas of a lighting capacity of 22 candles.

"*Ninth*—That the evidence produced by complainant tends to establish that it has received an average rate of return from 1906 to 1919, inclusive, far in excess of six per cent.

"*Tenth*—That it appears from complainant's own proof that the average rate of return from 1906 to 1919, inclusive, has not been less than 6 per cent.

"*Eleventh*—That in order to determine the fair value of the property of complainant used to supply its consumers with gas, and to determine the fair and reasonable cost of producing, distributing and selling gas to its consumers, it is necessary to consider not alone the property and operating expenses of complainant, but also the property, operating expenses and operating methods of the companies whose stock is all held, or the majority of which is held by complainant, which companies are: Astoria Light, Heat & Power Company, East River Gas Company of Long Island City, New Amsterdam Gas Company, Standard Gas Light Company of the City of New York, New York Mutual Gas Light Company, Central Union Gas Company, Northern Union Gas Company, The New York Edison Company, The United Electric Light & Power Company, Na-

tional Coal & Coke Company, and complainant has offered no proof, as above indicated, as to the above named companies.

"*Twelfth*—That the constitutionality of the statute in question cannot be properly determined by the facts applicable to complainant, when it appears, as here, that a number of other companies supply gas in the same territory and where it further appears that the distribution system of complainant is intermingled with the above named companies, and where their manufacturing plants are distributed throughout the same territory, and particularly where it appears that complainant owns more than a majority of the stock in each of the above named companies, and where gas is purchased and sold between these various companies, and where the gas supplied to consumers of complainant is inextricably intermingled with the distribution system of all of the above named companies.

"*Thirteenth*—That it affirmatively appears that complainant has combined with the following companies: Astoria Light, Heat & Power Company, East River Gas Company of Long Island City, New Amsterdam Gas Company, Standard Gas Light Company of the City of New York, New York Mutual Gas Light Company, Central Union Gas Company, Northern Union Gas Company, to supply gas in the City of New York, and enough has been shown by complainant's own proof to indicate that it is really complainant operating under various names, and for that reason the court cannot determine the constitutionality of the Act in question without ascertaining the fair value of all the property of the above named companies used in purchasing, distributing and selling gas in the territory commonly occupied.

"*Fourteenth*—That defendants say respectfully that they have not had their day in court, such as they feel the Constitution of the United States guarantees them.

"We mention a few instances to illustrate:

"Common-law proof has been dispensed with, as in the case of the books of the complainant.

"The right to be confronted with witnesses, and the right to cross-examine them, has been denied.

"Cross-examination of witnesses called has been curtailed, limited and, in some instances, stopped completely.

"The burden of proof has been erroneously shifted from the complainant to the defendants.

"These instances warrant the defendants, we respectfully submit, in asking that a mistrial be declared, and that what has been done here be pronounced, what we really think it is, a nullity."

The defendants ask, pursuant to Equity Rule 66, that the court hear the said exceptions, and to that end ask for an order to show cause why the said exceptions should not be sustained.

and the Special Master's report declared a nullity and the case retried before this court, or, in the alternative, that the motion made by the defendants at the close of complainant's case be granted and the complaint dismissed.

The complainant served defendants with a notice of motion returnable on May 26th, 1920, at 2:30 o'clock in the afternoon before Hon. Julius M. Mayer, United States District Judge, for an order confirming the report of the Special Master. This motion was promptly returned by the defendants upon the ground that the same was premature and not in accordance with Rule 66 of the Equity Rules of Practice, and that the defendants had not had the twenty days allowed by said Rule within which to file exceptions to the Special Master's report, and service of the notice was not admitted.

On or about the 22d day of May, 1920, the complainant served another notice of motion upon the defendants returnable in the District Court before Hon. Julius M. Mayer, United States District Judge, on May 27th, 1920, at 2:30 o'clock in the afternoon of that day, for an order confirming the Special Master's report. This notice was also returned upon the same ground as the previous notice. At the time both of these notices were received the defendants had not filed exceptions to the Special Master's report, and the time to do so had not expired.

The reason why an order to show cause is asked for, instead of the usual notice, is because defendants are anxious to expedite the hearing on said exceptions.

No previous or other application for the order herein applied for has been made.

Sworn to before me this 26th day of May, 1920.

WILBER W. CHAMBERS.

Notice of Final Hearing.

District Court of the United States, Southern District of New York.

THE CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

against

CHARLES D. NEWTON, as Attorney General of the State of New York, and others, Defendants.

Sirs:—Please take notice that this cause and the issues therein will be brought on for final hearing at a Stated Term of the District Court of the United States for the Southern District of New York to be held by the Honorable Julius M. Mayer, United States District Judge, in United States District Court Room Number One, on the twelfth floor of the Woolworth Building, Number 233 Broadway, in the Borough of Manhattan, City of

New York, on Wednesday, the 26th day of May, 1920, at 2.30 o'clock in the afternoon of that day, or as soon thereafter as counsel can be heard; and that at this time and place we shall move the said Court for an order confirming the report of the Special Master, as hitherto filed herein, and shall also move, upon the pleadings herein, the order appointing the Special Master, the testimony and exhibits received by the Special Master, the Report and Opinion of the Special Master, and any exceptions thereto filed herein by any of the above-named defendants, and upon all the proceedings herein, for a Final Decree in accordance with the prayer of the bill of complaint herein, and for such other and further relief as to the Court may seem just and proper and as the nature of this case may require.

Yours, etc.,

SHEARMAN & STERLING,
Solicitors for Complainant,
55 Wall Street,
Borough of Manhattan,
City of New York.

Dated, New York, May 19, 1920.

WILLIAM L. RANSOM,
CHARLES A. VILAS,
JACOB H. GOETZ,
Of Counsel.

To Wilber W. Chambers, Esq., Solicitor for Defendant Charles D. Newton, 51 Chambers Street, New York City.

John P. O'Brien, Esq., Corporation Counsel, Solicitor for Defendant Edward Swann, Municipal Building, New York City.

Terence Farley, Esq., Solicitor for Defendant Lewis Nixon, 49 Lafayette Street, New York City.

Notice of Return of Notice of Final Hearing.

District Court of the United States, Southern District of New York.

THE CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
against
CHARLES D. NEWTON, as Attorney General of the State of New York,
EDWARD SWANN, as District of the County of New York, State of New York, and
LEWIS NIXON, constituting the Public Service Commission of the State of New York, for the First District, Defendants.

Please Take Notice, That the within notice of final hearing received today, May 19th, 1920, is hereby returned to you upon

the ground that the same is premature and not in accordance with Rule 66 of the Equity Rules of Practice, and that the defendants have not had the twenty days allowed by said Rule within which to file exceptions to the Master's report, and service of same is not admitted.

Dated, May 19th, 1920.

Yours, etc.,

WILBER W. CHAMBERS,
Solicitor for defendant Charles D. Newton, as Attorney General of the State of New York,
Office and P. O. Address, Capitol,
Albany, N. Y.

To: SHEARMAN & STERLING,
Solicitors for Complainant.
55 Wall Street, Borough of Manhattan,
New York City.

Notice of Final Hearing.

District Court of the United States, Southern District of New York.

THE CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
against
CHARLES D. NEWTON, as Attorney General of the State of New York, and others, Defendants.

Take Notice that this cause and the issues therein will be brought on for final hearing at a Stated Term of the District Court of the United States for the Southern District of New York to be held in United States District Court, Room Number 235, in the Post Office Building, Park Row, in the Borough of Manhattan, City of New York, on Friday the 11th day of June, 1920, at 10:30 o'clock in the forenoon of that day; and that at said time and place we shall move the said Court for an order confirming the report of the Special Master, as hitherto filed herein, and shall also move, upon the pleadings herein, the order appointing the Special Master, the testimony and exhibits received by the Special Master, the Report and opinion of the Special Master, and exceptions thereto filed herein by the above-named defendants, and upon all of the proceeding herein, for a Final Decree in accordance with the prayer of the bill of complaint herein, and for such other and further relief as to

the Court may seem just and proper and as the nature of this case may require.

Yours, etc.,
SHEARMAN & STERLING,
Solicitors for Complainant,
55 Wall Street,
Borough of Manhattan,
City of New York.

Dated, New York, June 4, 1920.
WILLIAM L. RANSOM,
CHARLES A. VILAS,
JACOB H. GOETZ,
Of Counsel.

To Wilber W. Chambers, Esq., Solicitor for Defendant Charles D. Newton, 51 Chambers Street, New York City.
John P. O'Brien, Esq., Corporation Counsel, Solicitor for Defendant Edward Swann, Municipal Building, New York City.
Terence Farley, Esq., Solicitor for Defendant Lewis Nixon, 49 Lafayette Street, New York City.

Opinion.

United States District Court, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
against
CHARLES D. NEWTON, as Attorney-General of the State of New York, and Others, Defendants.

This is a suit in equity brought by a gas company in the City of New York to enjoin the execution by the defendants of Chapter 125 of the Laws of 1906 of the State of New York, which imposed on the plaintiffs, among others, a limitation of eighty cents in the rate which it might charge to consumers. The suit was begun in January, 1919, and made defendants the Attorney General of the State, the District Attorney of the County of New York, and the Public Service Commission of the First District, who are charged with the prosecution of violations of the statute.

A Master was appointed on May sixteenth, 1919, to take testimony, make computations and report back to the court with all convenient speed. Over fifteen thousand printed pages of testimony were taken upon which the Master has filed a report. More than one hundred exceptions have been filed to the report and the cause now comes on for hearing on these exceptions.

The suit is in sequence to a former suit under the same statute, begun on May first, 1906, against the predecessors of these

defendants and the City of New York. This was also tried before a Master and argued before the Circuit Court, which granted a decree in favor of the plaintiff (*Consol. Gas Co.* vs. *New York*, 157 Fed. R. 849). The defendants appealed to the Supreme Court, which reversed the decree and dismissed the bill, giving leave to the plaintiff, however, to file a new bill at any subsequent time when experience might have demonstrated that the rate fixed by the statute was inadequate to a fair return upon the value of its property (*Willcox* v. *Con. Gas Co.*, 212 U. S. 19). This decision was rendered on the second day of January, 1909, so that the defendant allowed ten years to elapse during which it operated under the statutory rate, before beginning this suit.

The bill is of the usual sort in rate cases, alleging that the rate is confiscatory in that it prevents a fair return upon the property of the company, that the penalties imposed by the statute are so large as to crush it in the event of disobedience, and that it has no means of testing the constitutionality of the Act except by a suit in equity. The jurisdiction of this court and the equity of the bill, if the allegations are maintained is not disputed, and is amply supported by prior adjudications in similar cases.

The plaintiff is a corporation organized under the laws of the State of New York under Chapter 367 of the Laws of 1884, which permitted the consolidation of six gas companies then doing business in New York City, all of which had been in existence for a long time, one of them as far back as 1823. At the time of the consolidation the value of the stock of the six companies as then quoted on the Stock Exchange of that city was close to forty million dollars. The stockholders agreed upon a plan of consolidation in accordance with the statute in which they fixed the value of their franchises as seven million, seven hundred and eighty-one thousand dollars, and the value of their other property at about thirty millions. For this, stock in the amount of thirty-seven million seven hundred and eighty-five thousand dollars was issued, of which over two million was held in the treasury and the other thirty-five million issued directly to the stockholders of the constituent companies. The company began business in November, 1884, and the stock was increased in April, 1900, to fifty-four million five hundred and ninety-five thousand dollars; and later, in July of that year, to eighty million dollars. At the present time there is outstanding one hundred million dollars of capital stock and twenty-five million of seven per cent convertible bonds.

The Master found the value of the assets of the company, including its franchises, at about seventy-five million dollars, and its annual sale of gas at the present time about nineteen billion cubic feet. Upon this he found a probable income for the cur-

rent year of about nine hundred thousand dollars, representing not more than one and two-tenths per cent. on the value of the property as found. He further found that the necessary rate of return at the present time was eight per cent., requiring an income of about six million upon the same value.

The Master found the net cost of delivering gas to the consumer by the company was 75.18 cents a thousand cubic feet. This finding he based upon the full year 1918, and the first eight months of the year 1919 contenting himself with the statement that prices since August thirty-first, 1919, had become higher than during the period of twenty months which he had considered.

In view of the voluminous testimony and the great number of issues which are concerned, it would serve no purpose to recite in detail more of the findings or any of the evidence.

WILLIAM L. RANSOM, JOHN A. GARVER, CHARLES A. VILAS and JACOB H. GOETZ, for the Plaintiff.

JOHN P. O'BRIEN, JAMES A. DONNELLY and HARRY HERTZOFF, for the Corporation Counsel.

WILBER W. CHAMBERS AND CLARENCE R. CUMMINGS, for the Attorney General.

WILLIAM HAYWARD, JOHN HOLLEY CLARK, JR., and ELY NEUMANN for the Public Service Commission.

Learned Hand, *D. J.*: This bill was filed under the leave given in *Willcox* v. *Consolidated Gas Co.*, 212 U. S. 19, to begin a new suit of the same kind after a period of probation should have tested the adequacy of the rate established by the statute. Ten years passed before this was done, and the experience gained meanwhile would, under ordinary circumstances, have been sufficient. However, during that period there occurred the extraordinary rise of prices due to the Great War, which has made the future harder to forecast upon the basis of ten years' past experience, than could have been apprehended in 1909, and as a result, we are not in so good a position at the present time to judge of the future effect of the statutory rate as we should normally have been, *i. e.*, the experience of the first seven of the ten years is of little present value.

The Proper Period for a Test.

The defendants wish me for this reason to take an average over the whole period both for cost of production and capital valuation. Now whatever may be the proper method, that certainly is wrong. The case is not one in which an average can safely be made, because the variations in prices which the whole period covers are not normally recurrent. Averages presuppose that the resulting figure will cover variations, which through certain or nearly certain within the period taken, are impossible

of exact prediction in their occurrence. They may therefore be spread over a period precisely as an insurance loss is spread. The recent rise in prices is not of this kind, because there is no reason whatever to suppose that during the next period of say five years, which is long enough to justify some present action, the same causes will operate in reverse as have operated in the past. An average would be therefore meaningless. Either the evidence of the last three years is sufficient basis for a forecast, or it is not. If not, ante-bellum values should be used merely for lack of any better; if so, the average of the last three years is the proper basis.

It is quite true that if these prices could fairly be regarded as such temporary aberrations as the rate was meant to cover, this would not be so. Persons who embark their money in such enterprises must take the bitter with the sweet and the lean years with the fat. Rates when established are not intended to make a nice adjustment to all ensuing conditions; they are too long and costly to fix, especially in court. In such cases it is fair to take a period of years as the defendants wish and to compare that with the rate. But if, as I think, we have now fair warrant for supposing that we are in a condition not contemplated at all, when the rate was fixed, all such considerations disappear.

Several reasons lead me to believe that present price-levels are not merely transitory, though I recognize the danger of any prophecy. Whatever their precise cause, it is universally conceded to be due to the Great War, and by that I mean of course not to the prosecution of hostilities, but to the economic exhaustion and inflation of the circulating medium which these involved. In general it is a safe inference to suppose that Europe will not be able to resume its ante-bellum production for a time measured rather by years than by months, and that the recovery of a sound financial condition will take longer. We in this country are not only influenced by conditions in Europe, but we are subject to our own local inflation and disorganization of industry, from which no one can know when we shall recover. The question is a practical one and comes, I think, down to this: the plaintiff is faced with a condition which permits it to receive much less than the return which the statute contemplated and which the constitution is thought to insure it. So far as human foresight can see, that condition, though probably not permanent,—certainly in its present exaggerated form,—is bound to exist over a period of some years, at least in such things as coal, oil and labor, which are the plaintiff's chief costs. There is then the certainty of a continued loss for an indefinite but substantial time, due to causes which were not in existence and could not possibly have been apprehended fourteen years ago when the rate was fixed. Does

this prospect justify the court in abandoning the inertia which it properly feels when the complaint is based upon temporary variations? Is it fair to continue to impose a rate which has clearly ceased to correspond with the underlying presuppositions upon which it was based? I think that the prospect does justify the court and that the rate has become unfair, at least until the conditions change.

Three reasons justify this assumption now, each of them serving to protect the public against the consequences of a mistake. The first is that at worst the rate will not be finally declared insufficient. As in all such cases, the defendant will have leave at any time to vacate the decree upon showing that the old price-levels have been reached, or nearly enough to put again into effect the statutory rate. This does indeed impose a burden of proof upon the State when that time comes, but a denial of any relief now causes certain and irremediable damage to the company for so long as present prices remain. While constant readjustments are impracticable, and for this reason public service companies must endure transitory periods of insufficient profit, high and rising price-levels have already lasted a period of thirty months, January first, 1918, to August first, 1920; enough, I think, to throw the initiative upon the State of showing that conditions have changed, when they do change. The second factor is the present discrepancy between the rate and a fair profit which gives a reasonable assurance that the period and the fall in prices must be substantial, before the rate can prove sufficient. It also makes more imperative some relief to the company. The third factor is that it is not in the least essential that the State should have recourse to the unwieldy process of a new suit, which an application at the foot of the decree in effect would be. The Legislature by an amendment to Section Seventy-two of the Public Service Law of New York may at any time give to the Public Service Commission jurisdiction over rates not only below but above the statutory maximum whenever the statute is in abeyance. Indeed that might have been thought to be now the law, had the opposite not been declared in *People ex rel. Municipal Gas Co.* v. *Public Service Commission*, 224 N. Y. 156. By such a change the whole subject could be regulated by that authority to which, if I may say so, it properly belongs, and a procedure established plastic enough to make unlikely the continuance for fourteen years of a fixed rate in the face of changes such as have occurred.

So far as I have found in the books, a test of two years is enough. In the *Minnesota Rate Cases*, 230 U. S. 352, 469-472, the rate fixed by the authorities for the Minneapolis & St. Louis Railway, the only one disturbed, was set aside on an experience of only one year. In *Municipal Gas Co.* v. *Public Service Commission*, 225 N. Y. 89, 98, a complaint was sustained which al-

leged the insufficiency of a rate for a period of only two years, 1917 and 1918. In *Darnell* v. *Edwards*, 244 U. S. 564, the period was thought too short but it included only six months, and those not including the recent era of inflation. In *Rowland* v. *St. Louis, etc., Co.*, 244 U. S. 106, a rate was upset upon a showing of only two months, coupled with opinion evidence of its being a fair test. Excepting these cases I know of no judicial ruling on what length of time is necessary.

The Master has taken complete evidence over a period of twenty months, from January first, 1918, to August thirty-first, 1919. Since that time eleven more months have passed, during which there has been no fall in price-levels. The record has some evidence of this down to a later day, but of course not down to the date of this opinion. But evidence is not necessary in the face of so patent and obtrusive a fact of daily life, and it is quite fair to say that the condition which the Master found as of August thirty-first, 1919, has been aggravated during the succeeding year. The period, despite its unusual character, I find to be a sufficient basis for the calculation of the cost of production and the "rate-base" for a future time long enough to call for some judicial action.

Computation of the "Rate-Base."

I have just said that the present range of prices seems to me applicable not only to the cost of production but to the valuation of the "rate base," *i. e.*, the permanent means of production, and this necessarily involves a decision upon the vexed question as to the values upon which the company is to be permitted to earn its profit. Costs of production involve those items which the company must pay before it begins to see any profit whatever; its economic motive for embarking in and maintaining the enterprise depends altogether upon the return which it can get out of the property which it has bought and erected into an industrial unit. Hence it is the profit, and strictly speaking this alone, which matters with the stockholders. It must be owned that much of the discussion shows either a timidity or an inability to grasp any principle in dealing with the "rate-base." With deference it appears to me to be merely an abandonment of any attempt to deal intelligibly with the question to say that cost of reproduction *and* the original cost are each elements to be considered. That statement can mean nothing whatever unless it is accompanied by a constitutive rule which will establish some standard by which these may be used. It would be understandable to say that the two estimates should be averaged, but such a rule could obviously command no support, because it would correspond to no relevant considerations of policy. Merely to leave the question

with a caution that several elements are to be considered is to abandon any effort to solve it.

The recurrent appeal to a just rate and a fair value assumes that the effort is to insure such a profit as would induce the venture originally and that the public will keep its faith so impliedly given. That, I think, involves a tacit comparison of the profit possible under the rate with profits available elsewhere, *i. e.*, under those competitive enterprises which offer an alternative investment. The implication is that the original adventurer would compare future rates, varying as they would with the going profit, and would find them enough, but no more than enough, to induce him to choose this investment. By insuring such a return it is assumed that the supply of capital will be secured necessary to the public service. As the profits in the supposed alternative investment will themselves vary, so it is assumed to be a condition of the investors' bargain that their profit shall measurably follow the general rates. It is of course not relevant here to discuss these presuppositions, since they have now the support of authoritative law.

Certain risks in ordinary competitive enterprises can be reasonably anticipated and business practice includes them in an amortization account. New processes and machines are constantly appearing which make the old obsolete; ordinary wear and tear makes necessary replacements. The return to make these good is commonly carried in a separate account by all prudent business men and does not come out of the rate. It is true that individual misfortunes cannot be foretold, and these a given company must bear just as any single competitive venture would have to bear them. Among these, however, is not a general rise in prices, which affecting all alike at least after a time, enables each to raise his price not only because of his costs in labor and in materials, but to obtain a proportionate increase in his profit, based upon the increased value of his plant and machinery. All competing producers who give the same service must keep invested an increased number of dollars in capital to do so. The risk of the depreciated dollar is not one which industry in general will bear; it is indeed no risk at all.

Moreover, a profit based upon the enhanced value of the capital adds nothing in truth at all to the company's wealth. Though its capital be measured in more dollars and so, too, its profit, that profit is still paid in the fallen dollar and has no greater buying power than it had before. The increased valuation of the capital will for the years of the depreciated dollar leave the company exactly as it was; it will merely prevent its being compelled to share its putative fair profit with its customers, which by hypothesis it should not be asked to do. The company gains nothing, the customers lose nothing.

Indeed all this is so much in the primer of economics that it is inconceivable it should be misapprehended as to working capital for instance, and the contrary view has crept in, I think, only when one thinks of the more permanent kinds of capital, and instinctively assumes that the rate will apply after that capital has resumed its former prices, if it ever does. There is in short a tacit assumption that the valuation must last as long as the permanent capital. There is no warrant for that assumption, because precisely the same reasons which compel the "rate-base" to be raised after a rise in price, compel it to be reduced after a fall. There is a natural enough reluctance to a continuous re-appraisal of plants and properly so. It must of course appear that the variation in prices is not transitory, and the period of probation before a company is allowed relief is precisely to insure against that possibility. The chance of loss during that period such companies must endure, and there is an inevitable "lag" in readjustments in each direction. But once it appears that the new price-levels are not transitory it is no answer to the company's complaint to say that at some future time prices may fall. When that time comes, if it does, the property must again be revalued, but meanwhile they are entitled to some protection, and, since these have become questions for the courts, to the protection of the courts.

The rule of the present reproduction cost which is a necessary consequence of the foregoing argument, appears to me to have been either expressly or implicitly recognized in all the cases in which the Supreme Court has passed on these matters *Willcox* v. *Consolidated Gas Co.*, 212 U. S. 19, 41, *Des Moines Gas Co.* v. *Des Moines*, 238 U. S., 153, *Knoxville* v. *Knoxville Water Co.*, 212 U. S. 1, 10, *The Minnesota Rate Case*, 230 U. S. 352, 434, 454, 455, *San Diego, etc., Co. v. National City*, 174 U. S. 739, 757, *San Diego, etc., Co.* v. *Jasper*, 189 U. S. 439, 442, *Darnell* v. *Edwards*, 244 U. S. 564, 568. It is true that its application has not distinctly arisen since the recent rise in prices, but it is not possible that it should have general application and yet not cover this, its most glaring illustration.

I am of course aware that the present cost of a plant, and especially of a putative standard plant, is hard to prove, but that is no answer. It may in fact be the case, usually it is, that the safest basis for estimate is the evidence of what the actual plant cost with its additions, which are not renewals or a cover for renewals. The mere opinions of experts are a doubtful need,—we need not lean upon them;—but the question of evidence is one, and of what it shall show is another. I am aware also that in the case of railways the principle of reproduction cost presents most baffling problems, perhaps fatal to its application,* but these arise from the fact that the valuation of a substituted service in the case of railways is impossible

without already presupposing the existence of a railway, so much do railways affect the whole life of the community. In the case of the land used by a gas company the valuation may theoretically be said to involve a similar begging of the question, for without gas a modern city would be another place. Nevertheless, land and building materials and machinery have a value independent of the existence of this or that or any gas company. No "gas value" is involved as was "railway value" in *The Minnesota Rate Cases, supra*. All the component elements are purchasable, and the cost of the standard plant can be ascertained with fair accuracy. The single element of the cost of tearing up the streets must, however, on authority be omitted, *Des Moines Gas Co.* v. *Des Moines, supra*.

Depreciation.

The defendants insist upon the element of depreciation based upon an allowance each year of that proportion of the total value which a year bears to the whole life of the plant. The Supreme Court (*Knoxville Water Co.* v. *Knoxville, supra*; *Minnesota Rate Cases, supra*) has recognized that some depreciation is a proper element in estimating the "rate-base," but has not as yet authoritatively settled on what principle it shall be calculated. It seems to me hardly possible in the case at bar to avoid taking a position with regard to that principle.

If the proper standard for a "rate-base" is the present cost of a substitute plant of equal capacity, as I believe, depreciation can be a function of it only in case the allowance for renewals to the plant under consideration will in the future be greater than that of the assumed standard. If the rates allowed in the future include only an allowance for renewals of a new plant the company will have to abate something from its normal profits because of its extraordinary renewal charges. Theoretically it makes no difference whether this problem is met by giving the plant a smaller value at present because of its future greater renewal charges and then allowing a higher rate for renewals, or by giving it its present value based on capacity and letting it bear its extra renewals out of its normal profits. Were the plant sold, the future abnormal renewals would be reflected in the sale price, being discounted at once, but that would be because the parties must at present clear their accounts once and for all. The seller would be unwilling at once to abate from his price, and later to allow the buyer from time to time for his unusual renewals. In the case of a public service company where the authorities may always require the plant to be kept up to standard, there is an obvious advantage in declining to attempt a repeated adjustment between the actual renewals necessary and normal renewals, as would be necessary if the present prospect of such allowances were now discounted; it is

the better practise to allow the plant to bear its own extra renewals and to insist that it shall always be kept up. Therefore, it appears that, so far as concerns the future, the age of the plant should not be a function in the "rate-base."

On the other hand, in computing the "rate-base" from the original cost, depreciation is of vital consequence. Practical men will prefer to ascertain the cost of a present plant by experience, when they can, rather than by estimate, just as the Master here has done. In so arriving at the cost of a present plant of equal capacity, it is clear that the original cost of the plant in question must be abated by depreciation, so far as that is reflected in a loss of capacity. In such a calculation, however, they must figure past renewals as an offset to past depreciation and if in fact the capacity has remained the same, depreciation should not be a function of the "rate-base" at all. In such a case the inquiry as to depreciation should be confined to changes in "price-levels."

Franchises.

If this case were *res integra*, I should not hesitate to refuse any valuation to the company's franchises. On principle the case is very clear. A franchise is a right to keep mains in the streets and furnish gas to the inhabitants of the city and it is granted upon condition that the rates shall be controlled. If the franchise gets a value because the rates have not been controlled, the "reasonable expectation" of their continuance is without basis, and that is the only possible ground for a vested interest in such rates. The inaction of the authorities in the past gives no prescription, and without such prescription the franchise can have no capital value unless the very point is assumed. That the franchise has a kind of value is of course true enough; it alone protects the "tangibles" from becoming junk; but as a part of the "rate-base" it should never figure. This was all stated in *Consolidated Gas Co.* v. *New York*, 157 Fed. R. 849, and not denied in the Supreme Court, but each court thought that the incorporation under the State of 1884 constituted a recognition by the State of some capitalizable value to the franchises of the company, and the Supreme Court fixed that at seven million seven hundred and eighty-one thousand dollars, the original sum. That was in 1909, twenty-five years after the company had been organized and when its business had grown very substantially. I own that I am not clear whether or not the Supreme Court meant to declare that this value should exist perpetually as a means of drawing a profit of 6 per cent. or more, but it is clear enough that if it was worth that sum in 1884 and 1909, on any conceivable theory it is worth as much in 1920. Therefore, it appears to me that the Master did all that he could under the circumstances in adding

that sum to the "rate-base," at least until the Supreme Court shall indicate some contrary rule.

The defendants, however, urge that the franchise rights of the company have changed since 1909. Their contention rests upon circumstances, which are more detailed than it is necessary to set down here, but the substance of which is as follows. The constituent companies, consolidated in 1884, held a number of legislative grants to furnish gas in New York and to lay mains in the streets. These were all substantially similar in this respect, that the consent of the municipality was necessary before the streets could be opened. In the case of each franchise the municipality gave its consent to the opening of the streets for a limited period only, and before 1909 that period had expired in the case of all but three, *i. e.*, the "Anthracite," the "Harlem" and the "Knickerbocker." Of these, the last two affected only such territory as lay north of 79th Street in New York, that is, the district last populated. In 1913 the consent to dig up the streets given under the "Anthracite" franchise also expired, so that at the present time the company has no such rights south of 79th Street. North of that street it has such rights as the municipal consents under the "Harlem" and "Knickerbocker" franchises still give it. Not only does the "Anthracite" franchise still exist, shorn of the consent to dig up new streets, but the company has several other franchises of the same character, under which consents were originally given to dig up the streets, which had long since expired before 1909 and indeed with one exception before 1884.

Therefore, the change in the company's rights since 1909 comes to this, that it now has no more rights to dig up the streets south of 79th Street, which it had until 1913 under the "Anthracite" franchise. Its right, however, to maintain its existing mains and to furnish gas to its customers is not affected by the expiration of that consent, *New York* v. *N. Y. Mut. G. L. Co.*, 207 N. Y. 647. The change in the value of the franchises turns upon the value of the right which existed in 1909 but exists no longer to lay new mains in the streets below 79th Street if the municipal authorities consented? Obviously that question can not be answered. Not only does this record show that the streets are already so full that no other mains could in any case be laid, but the original right was not absolute, depending as it did upon the exercise of the discretion of the municipal authorities before it could be enjoyed. It seems to me a fanciful conclusion to attribute any value to the right to require by mandamus (*Ghee* v. *Nor. Un. G. Co.*, 158 N. Y. 510, 525), the exercise of such a discretion in a territory where under the record no intelligent authorities would in any event grant such a right, or could be required to do so. The substance of the right remains and has been expressly so adjudicated in an

analogous case. Perhaps the Supreme Court may choose to modify its original ruling upon the whole subject, but it would be a most unreal distinction to base such a modification upon the slight differences which are shown in this record. I shall therefore accept the valuation as settled in the earlier case and by the Master here.

Rate of Profit.

Another preliminary question is that of the proper rate of profits. In *Willcox* v. *Con. Gas Co.*, 212 U. S. 19, the rate of 6 per cent. was accepted as a proper return. In *Denver* v. *Denver Water Co.*, 246 U. S. 178, 194, the same rate was impliedly accepted. In *Lincoln v. Lincoln Gas etc. Co.*, 250 U. S. 256, the court indicated that changed conditions of investment might change the rate. Eight per cent. was mentioned, though probably not as intended to cover the case of a sure monopoly such as this was described to be in *Willcox* v. *Con. Gas. Co.*, *supra*. The evidence in this record indicates that 8 per cent. is the going rate at the present time and that stands uncontradicted. For many months past the United States, certainly the most solvent debtor in the world, has paid either six or nearly six per cent., and other governments higher. As the facts develop in this case I need not find any rate except to say that less than six per cent. would be insufficient. I have made findings based upon both six per cent. and seven per cent. If the rate is to correspond with the market, seven per cent. would scarcely seem too high, and at least so much appears to have been taken as the standard in *Lincoln v. Lincoln Gas Co.*, *supra*, the last declaration of the court.

The Admissibility of the Books of Account.

Most of the evidence and testimony in the case at bar necessarily depended upon the records of the plaintiff contained in books of account of all descriptions supported by vouchers, books of original and secondary entry. These were proved only to the extent of showing their general character and that they had been kept in the usual course of the company's business. The same applied also to the Astoria books, that company being treated as though it were an operating unit of the plaintiff. Indeed, these books the defendants themselves offered in evidence.

The defendants objected to the reception of all these books on the ground that they were not properly proved. Probably the proof was inadequate, even under the present-day laxer rules, had they been used in an ordinary case, as, for example to prove transactions recorded in them on which obligations of a third person depended. The case is not such. This is a suit between the authorities of a State and a company

long since recognized as performing a public service and under the regulation of the State. Article Four of the Public Service Commissions law of New York puts the entire conduct of such companies as the plaintiff minutely within the regulation of the Public Service Commission. Section Sixty-six gives the Commission general supervision over all such, power to investigate the quality of their services and to fix its character, to prescribe the form of the records and the books it shall keep, to examine its officers and those records, to keep informed as to its doings and its property, to require a detailed annual report including its receipts and expenses and any other important facts it may wish, to enter upon its property and examine its books and vouchers, to compel the production of any such, to subpœna its officers, and to compel it to keep its accounts of separate business separately. Books kept in accordance with orders lawfully promulgated by the commission under such powers are on a different footing in a suit based upon the action of the State and against its officers, from even the same books if attempted to be used elsewhere. They have a public character derived from the supervision which can be and is exercised over them. The authorities are not of course bound by them in any event, but, prepared as they are, under their direct and constant supervision, they can scarcely be put in the category of the usual *ex parte* entries about whose admission the cases are concerned. The State having had so much hand in their creation and such continuous power of examining them, should not be entitled to demand a verification first-hand of every item by common law proof, before they become *prima facie* competent. The guaranty of the truth is sufficiently established by the scrutiny to which they are always subject, and the penalties which follow upon a disregard of the Commission's orders (Section Seventy-three). It would indeed be an incredible burden to require every item to be separately established and even these defendants have not gone so far as that. But if the books are not *prima facie* competent they might call for such proofs, nor can I reject them without putting the company upon their mercy.

Documents prepared in an analogous fashion came before the court in *Rowland* v. *St. Louis, etc., Co.*, 214 U. S. 106, 108, and *Northern Pac. Ry.* v. *Keyes*, 91 Fed. R. 47, 58. In each the court received them, though prepared in disregard of the strict rules of the common-law, because of the opportunity afforded the authorities to check their accuracy by a recourse to the original records and if necessary to the entrants who actually made them. In neither case did it appear that the company was under such stringent supervision as has been established in New York. Here, as in *Rowland* v. *St. Louis, etc., Co.*, *supra*, it may be said that the company "exhibited its work-sheets and

data to the (defendants), that the returns were made by the employees in the course of their business, and that if the (defendants) had desired to question any of the data they could have called for further verification."

Nor, indeed, were these books admitted until Teele had made a thorough checking of all the items by their vouchers for a period of a month or more, submitting them in this way to an honest test of their accuracy. The "purely negative attitude" of the defendants is not consonant with that desire "not to seek an unjust advantage from the difficulties of stating the company's case," which we are told must be imputed to a State in such affairs. *Rowland* v. *St. Louis, etc., Co., supra.*

I do not forget that in some respects altogether inconsequential so far as I can see, the books did not strictly conform with the orders of the Commission. These variations were in good faith and threw no doubt upon their veracity. They could have been easily corrected, had the Public Service Commission thought it necessary to correct them.

The Plaintiff's Failure to Supply Candle Power.

At the outset of the case the defendants insist that the plaintiff may not get equitable relief because of its violation of the statute requiring it to furnish gas of twenty-two candle power. While the requirement seems to be accepted by all competent persons as unnecessary and wasteful, it must of course be regarded as a duty imposed upon the plaintiff while it remains upon the statute book. A persistent and deliberate disregard of it might, I should think, bring this case within that somewhat indefinite rule which turns out of a court of equity a suitor who has himself been unjust in the very matter of which he complains. The situation here is short of that. In the first place, there is some question whether the readings made by the city employees charged with the duty are to be taken as against those of the plaintiff itself; indeed on that subject the master has found against the defendants. Apparently the tests are not absolute and men may honestly differ as to their results but I have not felt it necessary either to examine the method or to determine the issue upon the evidence for the following reasons.

The defendants proved many violations under their own tests which were taken ten times on substantially every day during the years 1916, 1917, 1918 and 1919, the master declining to go further back, and rightly, in my judgment. The importance of the failure to come up to the standard best appears from the averages. In 1916 and 1919 the average of all ten monthly averages was never below twenty-two for any month; in 1917 the month of November averaged (taking all ten) 21.80 and in December, 21.99. It thus appears that through all this time the city's own charts show that the average for each month

was up to standard unless one per cent. is to count. The year 1918 was indeed quite different. From May first to November first the United States had commandeered the oil in two of the plants for making toluol and the standard collapsed, falling in October to 11.92 (average of all ten observations). For the other months of 1918 the averages are as follows: January 20.61, February 20.52, March 21.63, April 21.51, December 20.98. These are the only months which need count, and the default amounted to 6.3%, 7%, 2%, 6.3% and 5% respectively.

But I think that the defendants are in no position to take these figures against the company anyway, because of the conduct of the business between them. The company also made its own tests and sent the results daily to the City, which retained them and took no action. Except for January and February, 1918, and the period of the commandeer, the company showed averages equal to the standard. Their averages for January was 21.36 and for February 21.27, about three per cent off. Now it must have appeared to the company and may well have been the case, that the acquiescence in these tests indicated either that the City was not confident of the superiority of its own tests, or that they meant to make no complaint of such slight variations. The standard is not useful anyway, and it was to everyone's interest not to have the company use more oil than was absolutely necessary, for oil is extremely expensive. In any case it comes now with the illest grace to such a plea to defeat a suit so vital to the company, after such acquiescence. The issue of the correctness of the company's tests was certainly waived and the whole defense boils down to the deficiencies in the months of January and February, 1918, as to which, *de minimis non curat lex*. It is not quite true to say that the whole thing comes down to that, because the defendants do even assert that the company should be charged with the defaults during the commandeer. More hardly seems necessary than to allude to such a sorry plea in a court of equity.

Gas Unaccounted For.

Into all the calculations there must come the loss of gas occasioned by condensation, leakage and perhaps other causes. It becomes necessary to know by how much the plaintiff's production must be taken to be larger than the sales passing through the customers' meters. While it is quite possible to tell this with accuracy for the whole system of which the plaintiff is a part, it is impossible to do so for the plaintiff separately owing to the interchangeable connections of the mains. The loss of the system as a whole has been reported yearly to the Public Service Commission, and represents the difference between the gas made and the sum of gas recorded by customers

and company's consuming meters. The years 1917 and 1918 were abnormally cold and showed an unusual loss of this kind. Obviously they are not a fair specimen of the normal loss occurring from these causes. The average for the whole system over the period of thirteen years during which the statistics were given to the authorities was 5.31% and unless there are some disturbing factors this is a valid starting point, which the company must accept. The only disturbing features suggested here are the poorer quality of coal and oil and I take against the plaintiff any doubt which those factors may raise. I accept the average of 5.31 as a proper allowance for the system as a whole, at least in a rate case.

The allowance to the company is certainly less than this figure, but how much must remain in doubt. The estimated average as reported by the plaintiff to the Public Service Commission for the years 1906-1918 inclusive was 4.09, and there is a strong presumption that this is correct. Nearly the same result may be reached by another method. It appears to be accepted that three per cent. is the proper allowance for all waste but main leakage, which varies inversely with the density of the customers per main mile. Now taken grossly the company has about double the density per main mile of the other companies. We may then apportion the sum of 2.31% for main leakage correctly by dividing the main mileage of the company in half and using the resulting sum for the total mileage. Assuming the total output to be thirty-three billions, of which the company will furnish twenty billions, the systems' loss from main leakage is 762.3 millions, of which the loss attributable to the company is twenty-eight per cent. or over two hundred and twenty-three millions. This is about 1.12% which with three per cent. equals 4.12% of the gas made, which is surprisingly close to the average reported by the company itself. I shall therefore take 4.1% as the proper figure for gas unaccounted for.

Price Paid by the Company for Oil.

Oil is the principal ingredient in the manufacture of water-gas and has of late been rising sharply in price. As it figures so largely the defendants have made a strong attack upon the contracts made and the prices paid by the plaintiff and this had best be decided before the account is stated. The company has always bought its oil from the Standard Oil Company of New Jersey, which has a common director with itself, who is on the plaintiff's executive committee to which were referred all oil contracts. It may be assumed that there is also some common stock ownership. The position, at least of the learned Corporation Counsel, is, that, owing to this community of interest, the company has favored the Standard Oil Company of

New Jersey in its contracts, necessarily throwing upon stockholders of the company a heavy loss, unless it can in t impose it upon the public. As this charge is equivalent t fraud in the conduct of the company by its directors, it serves scrutiny.

Between November first, 1905, and December, 1919, the c pany made in all nine contracts for the purchase of oil, not on its own behalf, but for its constituent companies, all whose needs it supplied. The result was that it was a v large purchaser of oil, making contracts for over a hund millions of gallons at a time. There is no reason to question propriety, of its course, provided it bought honestly and w proper care to get as good a price as possible. There were New York a number of independent small companies buy oil at the same time and the best evidence, as it appears to of the proper price to be paid can be gathered from the pri at which they bought. Other contracts were put in evide made in New Jersey, Philadelphia, and one in Boston, and th too are relevant, especially those in New Jersey. In New Y during the fourteen years in question, in all seventy-seven tracts were made besides those of the plaintiff. These were for much smaller quantities and it might naturally be pected that they should be at higher rates, but this is not ne sarily true, because the substance is a by-product of not limited supply and it has lately come into other uses which h increased the demand. It seems doubtful whether a large tract commanding a substantial part of the supply for a per of one year or more, must be at lower prices than a small That is the one conceivable reason for questioning the pri obtained by the company, and it appears to me an insuffici one especially in the light of the very large Philadelphia New Jersey contracts. A comparison may be made of e contract of the company by taking the average of all others New York made within six months, on either side of that tak and the following table is so computed, except in the case the last two contracts, which were at too short intervals permit that course, the second being a modification of the fi

	Company's Rate.	Average Rate of other N. Y. Companies.	
Nov. 1, 1905	....4.29	3.062	(2 contracts)
Jan. 5, 1909	....3.	2.78	(6 contracts)
Jan. 1, 1911	....3.	2.742	(3 contracts)
July 1, 1913	....3.035	3.462	(5 contracts)
July 1, 1914	....3.035	3.62	(9 contracts)
Nov. 13, 1916	....5.	4.8	(6 contracts)
Dec. 4, 1917	....6.5515	6.785	(6 contracts)

	Company's Rate.	Average Rate of other N. Y. Companies.	
Dec. 18, 1918	7.5721	7.528	(6 contracts — November and December, 1918)
Mar. 28, 1919	6.0824	5.904	(3 contracts, two in March at 6.081 and one in June at 5.75)

It is of course plain that this table may be misleading, because the price varied much within a year. It may be corrected by a comparison within a month on either side of the contracts without change of result. This shows that at least for the last seven years the company always bought at about the going rate. It is clear beyond peradventure that, based upon New York prices, the charge is utterly baseless that the company was paying more than the market, so far as there may be said to have been a market.

Nor was the New Jersey price substantially different from the New York price. This price is evidenced by four contracts between the Gulf Refining Company and the Public Service Gas Company of New Jersey, for very large amounts. The first of these was on June first, 1910, and the prices varied between 2.48 and 2.82 according to place of delivery. At that time the prevailing price in New York was about 2.45, the company making no contract for seven months thereafter by which time the New York price had risen. The next was on May twenty-fifth, 1913, between four and a half and five cents. The New York price ranged from five to a fraction more. The next was on August fifth, 1914, at prices between 3.05 and 3.55, the New York price being between three and a quarter and three and a half. The last was on June twenty-first, 1919, at prices between five and 5.85, when the New York price was from 5.75 to 6.08.

The Philadelphia contracts were five in number. The first was September thirtieth, 1912, at 3.95. In September of that year the New York price was 4.18, in November 4.5 and in December, 3.1875. The second was on October twenty-first, 1913, for 4.45; the nearest prices in New York were January, 1914, 4.25, and July first, 5.035. The third was on August fifth, 1914, at 3.05, and the fourth on September twenty-fourth, 1914, at three. The New York price on June first (company's) was 3.035, and on September tenth, 3.5. The last two contracts were on September twenty-third, 1919, and October twenty-first, 1919, at five. The nearest New York prices were June twenty-fourth, 5.75, and December between 7.05 and 7.55. Of these five the last alone shows any marked divergence, accounted for by a very sharp rise in the last month of 1919.

While the Philadelphia prices are on the whole lower than New York, there is no divergence, which may not be accounted for by differences in transportation.

The single Boston contract was on September twenty-ninth, 1916, for 3.625 to 3.995. At that time the New York price was four and three-quarters to five, about a cent more. This alone of all the contracts offered appears to show a very substantial divergence, which is not accounted for.

The upshot of it all is that unless all the other New York companies were paying too much for oil the plaintiff was not; and that as compared with the eastern towns of New Jersey and Philadelphia, New York was not on the whole paying enough more to justify any inference. The charge of a sinister connection between the company and the Standard Oil Company of New Jersey appears therefore to be without the slightest evidence. The proper price for oil in calculating the future cost of production is hard to fix. At the end of 1919 in New York as based upon three contracts made in December it was about seven and a quarter cents. The master has accepted a price of 6.9 plus lighterage as of the date of his report. He has allowed in his calculations as of the first eight months of 1919, 6.8, that being the actual price paid by the company. I have no doubt that this was an honest price made in a genuine effort to do the best possible and it is certainly less than could have been got later in that year; it is a most conservative figure for reckoning costs for the future, so far as can now be seen, and I accept it.

Substitution of the Coke-Oven System.

The defendants urged that in view of the increased price of oil a proper distribution between coal-gas and water-gas would not be twenty-two per cent. to seventy-eight per cent., the actual practise, but half and half, and that in producing coal-gas another system should be adopted known as the "coke-oven" system, advocated by Mr. Little, their expert, who made an elaborate calculation of the cost under that method. This involved a new plant, and it cannot be successfully maintained that the plaintiff is now obliged to erect one at the cost of eight million dollars. Indeed, the defendants do not say so, but that they should have built such a plant long since, during the era of low prices. It is not, however, in my opinion necessary to consider whether the plaintiff should build or should have built such a plant. The cost of production of such gas might still be a proper test of the production costs with which they should be credited, even though they cannot meet it. In short, their plants and methods might become obsolete through progress in the arts, and, if so, on a competitive basis they would

have to bear the consequent loss. It would be a risk which is inherent in the industry and one which so far as it is covered at all must be covered in the general allowance for replacements, or in the generally higher rates of profit which the industry should carry.

It becomes necessary, therefore, to consider the possibility of using the coke-oven system at the present time in New York. In the first place it must be remembered that the purchase of such gas from others is out of the question. Some suggestion was made that this could be bought from the Seaboard By-Products Company of New Jersey, but that is too extreme to deserve any comment. Leaving out those companies who purchase "coke-oven" gas, there are few who use it, about twelve in all, most of them in the Mississippi Valley, out of a total of a thousand companies in the United States. Therefore, I should doubt very much the propriety of using it as a test of normal cost even where the conditions made it apparently feasible.

Ignoring this, however, the conditions are not feasible in New York. Little made his cost $.199. In so doing he gave an enrichment cost of $.0553, on an assumed candle power of sixteen. Mr. Little's figure for enriching the House A. coal-gas, which he assumed to be sixteen candle-power, was $.0678, and was in fact, as Sangster's report shows, $.1155. I think he has got his enrichment cost much too low. It is fair to assume that his error in the figures for House A. both in candle-power and cost enter here and if so, that cost must be raised $.06, making a total cost of $.259.

Little's whole theory presupposes that a part of the residual coke should be sold at a price of seven dollars a short ton, and that the remainder should be credited at six dollars upon the company's water-gas production cost. He knew nothing whatever about the price at which coke could be sold in New York except what was told him and his information was erroneous. In 1919 the Seaboard Company was selling it continuously to the plaintiff at six dollars and fifty-five cents a long ton, delivered alongside, and the cost of delivery was certainly fifty cents and perhaps sixty-five cents. The price to the Seaboard Company was not more than six dollars and five cents to five dollars and ninety cents per long ton, or five dollars and forty cents to five dollars and twenty-seven cents per short ton. Little figured one hundred and seventy-two thousand four hundred and ninety-nine tons at six dollars, and four hundred and eighty-five thousand three hundred and nineteen tons at seven dollars, and his error is $.128 or $.146 (he appears to have been mistaken in admitting that the difference was seventeen and a half cents). His price would become in the neighborhood of forty cents, *i. e.*, within one

and a half cents of the coal-gas price. Considering that his labor cost is only about one-half that of House A., and that his assumed coal price of five dollars and twenty-eight cents does not agree with Sangster's figures even when reduced to short tons, it is quite apparent that his conclusion of twenty cents for coke-oven coal may not be taken as a basis for a substitute price. Furthermore, here as elsewhere he assumes an output of eighty-two and a half per cent. of total capacity in a year, which is greater than the actual output even for the three winter months.

Mr. Doane had been for many years concerned with the coke market in New York and its environs and up to 1915 had made more or less continued efforts to obtain a market for so much as the company did not use. After that time it became cheaper to use than to sell it, but his judgment based upon his experience is that it would be impossible to sell such large quantities as would be produced by the coke-oven process. As a fuel it has great advantages, but the people are not used to it and it requires different handling from anthracite coal for which it is a substitute. In Doane's efforts he found this an effective barrier to its introduction. My conclusion is that while the testimony is, as the master says, impressive, it would be unfair to assume that the coke-oven system will be more economical, and that it is too uncertain anyway to justify taking its cost of production as a standard here; its results are too indeterminate. As to the so-called "chamber-oven" system, it is too experimental yet to be taken as a substitute cost.

The other question is of the proper proportion of coal-gas to water-gas production. While the constituent oil of water-gas remained a by-product for which the demand was slack, there were great economies in its manufacture. Not only did it take very much less coal, but the plant was decidedly cheaper and there was no problem in disposing of the residual coke. With the discovery of the new uses for this oil, itself a residual, and the ability to extract gasoline from it, the price has greatly risen and it is a doubtful question how long it can continue to be used. While the statute imposes a twenty-two candle power standard both sides agree that a certain amount of water-gas is a necessity for the coal-gas must be enriched and this requires oil. Mr. Little gave the proportion of half and half as ideal, where such a standard obtained, though the practice of the plaintiff has been about twenty-two per cent. to seventy-eight per cent. He said, however, that he was not aware of any such plant, and in December, 1919, when it was decided to add to the Astoria plant a water-gas unit was selected. This was after this case had progressed for many months and the plaintiff knew that its practice was under criticism. It was moreover in the face of a sharply rising cost of oil. Ignoring

the supposititious desire to play into the hands of the Standard Oil Company, which seems to me wholly apocryphal for the reasons I have given, I can see no motive for it but an honest belief that weighing all considerations the chances still favored water-gas manufacture.

Not only is the fixed capital item a factor, but the cost of coal is advancing with that of oil. Furthermore, it has been extremely difficult to get a proper supply of coal at all, and that difficulty still remains. It is due to transportation troubles, which we all hope will be solved in the near future, but solved they are not yet and they must continue for a season to enter into the forecasts of a manufacturer who at any cost must be assured of a regular and sufficient supply of his raw materials. No one can of course prophecy what relation the costs of coal and oil will be in the future and for the present I see no reason to revise the judgment of the plaintiff's officials in choosing this plant. As in other cases where the matter rests in their discretion, I think that a presumption exists that it is well exercised until the contrary is shown. I have therefore made all calculations on the present proportion of production, though the alternative of half and half is set forth alongside. It makes no difference in the final result.

Cost of Production in 1918 *and* 1919.

Having disposed of these preliminary questions, it becomes possible to consider the cost to the plaintiff of making gas so as to compare it with the rate. That cost is made up of four items; the cost of production in the gas-house, the cost of distribution, taxes, and storage and replacements. The difference between the sum of these and the income is profits and should be compared with a fair return upon the capital invested. I shall start with the cost of manufacture in the plant.

The master accepted for a standard the cost of manufacture, taken from the books of the Astoria Company, for the first eight months of 1919. This is a plant over ten years old, but it may, I think, be safely taken as a proper standard. Certainly Mr. Little thought that for coal gas, House A., and for water gas, House C., were suitable. He thought House B. not economical because of the absence of certain labor-saving devices, though the item for labor was greater for House A. in his estimates, but of House A. he made no complaint.

I shall therefore take the analysis of the costs at House A. for coal-gas and House C. for water-gas as taken from the Astoria books for the full year 1918 and for the first eight months of 1919. Sangster, the defendants' accountant, was given full opportunity to examine these and to check their accuracy and his tables I use. His results must be accepted as true and valid, except in so far as any of the practice in that

house can successfully be criticized. I know of no such possible criticism unless it be the amounts of materials used and the extent to which the houses were driven. The second point comes up for consideration later and upon the first I shall say but little. The amount of coal and oil necessarily vary with the quality of each. Everyone agrees that the quality of coal has fallen off in recent years; it is urged that at Astoria the amount of coal is inordinate. Now Mr. Wood's estimate of bituminous coal for coal-gas was indeed only two hundred pounds and that was ample before 1916, but in 1 18 House A. in Astoria used by Sangster's tables 207.6 pounds, and in 1919 nearly 211.5. These figures seem too large and would have been so in the earlier years, but Mr. Little himself thought Wood's estimate too low at the present time and insisted that two hundred and seven pounds was necessary, substantially the Astoria practise in 1918, and near enough to that of 1919 not to justify suspicion.*

The bench and boiler fuel accounts in either year was a very small proportion of the cost of materials and any saving if saving there should have been would hardly figure appreciably.

As respects water-gas the necessary amount of oil to be used is not in much dispute, at least so I understand it. It is true that the average in the Manhattan plants has gone up from 3.80 gallons in 1913 to 4.1 in 1919, but that is less than eight per cent. increase, easily accounted for by a change in quality. It is noteworthy that in 1915, long before this suit was in contemplation, the quantity used in the Manhattan plants was 4.06, substantially what it is now at Astoria.

As respects generator fuel for water-gas, Sangster gives for House C. 35.3 pounds in 1918 and 36.43 in 1919. These are higher than either Woods's estimates or the practise on Manhattan but by less than nine per cent. in 1918. The item is only ten cents in that year and if Manhattan results were accepted it would make a difference of .9 cent in the price. Whether Astoria got worse coal or what was the reason I do not know. I have corrected the water-gas price by .9 of a cent for each year to allow for this, which seems to me the only correction necessary on any of the items.

Taking, then, House A. as such a standard and accepting Sangster's analysis of its actual expenses, we may start with a total cost of production at the plant meter for coal-gas of $.4155.

*The correction would be so little that I think it not worth while making, certainly in 1918, the only year when the profits are at all near the rate. Thus coke, a residual, varies with the coal used, at least so Sangster says in his report. The difference between the coal cost and the coke returns for House A. in 1918 was $.05648. If I take 200 lbs. for that year the credit would be 96.6% of that or $.05456, a difference of $.00192. 22% of this with correction for waste is only $.00046 for the difference in joint cost. The similar figure for 1919 is $.00183.

Sangster's figure for water-gas at House C. is $.44746, which I take at $.43846.

Taking the average of $.4155 and $.43846 on the basis of twenty-two per cent. for coal gas and seventy-eight per cent. for water gas, the final figure is $.4334. If the proper proportion between coal and water gas be half and half, this figure would be $.4270. Allowing a loss of gas on the average of 4.1% the cost in the consumer's meter is for these two figures respectively, $.4519 and $.4452.

Little's figure for ideal coal-gas production at House A. in 1919 is $.28 and for water-gas at House C., $.396. The difference is in part taken up in the cost of materials, and in the number of employees, his estimate of labor being prepared upon hypothetical standards of what a proper plant should require. As to the cost of materials, the chief difference is the price of oil. Thus, the difference for oil alone is $.03149, making the cost of water gas $.4275 if so corrected, as against $.43846. The apparent difference is much more marked in the coal-gas made in House A., but most of it is in oil, repairs and the like. For example, there is a difference of $.0477 in the cost of enrichment alone which certainly should be taken on the basis of the actual amounts paid for oil and the necessary amounts used. Again for electric power, superintendence and repairs, he allows only $.0255 in all, (as I figure the several items), as against actual expenses of $.08309, a difference of $.0576.

Thus with only these corrections, which are inevitably proper from any aspect, his ideal coal-gas cost for 1919 becomes $.3853 and his water-gas $.4275. Taking these figures in the two proportions mentioned and making allowance for 4.1% loss, his figures would be respectively, $.4358 and $.4238. These differ from the figures for 1919 by $.0161 and $.0214.

Some part of this is probably accounted for by the fact that in Little's figures he considered House A. as running at one hundred per cent. per day for three hundred and ten days and House C. at one hundred and ten per cent. capacity for three hundred and sixty-five days. If this was erroneous the fixed charges on each house were divided by too high a figure, and the result was too small per thousand cubic feet. I have already noticed a difference in the case of some of these items, but it will obtain in all those whose gross amount, unlike materials, does not vary directly with production. Among these labor is one, at least in House A., with inclined retorts, since the same crew will make a varying output at the same wages. This, Wood says, is not so in House B. It is quite clear that the supposed optimum of Little is far beyond any practical possibility and should not be taken as a standard. All the plants necessary for the daily "peaks" with reserve must be kept up all the time with some part of their complement, and it is not fair when seeking a stan-

dard not to credit any particular plant with so much idle time as all the company's plants must collectively bear. Under the heading, "Present Capacity and Reserve" I have considered this matter, and show that it is impossible to say that the company has too much capacity. It is, of course, always possible to show that a given plant was worked less than the average, *e. g.*, the Fourteenth Street and Forty-second Street plants, and that its costs should not therefore be accepted as a guide, but that is not the case with either House A. or House C. In 1918 the company's total production, leaving out Fourteenth Street and Forty-second Street and gas bought, was 17,599,323 thousand cubic feet. Its daily rated capacity was 84,000 thousand cubic feet, a total for three hundred and sixty-five days of 30,660,000 thousand cubic feet. The production was fifty-seven per cent. plus of rated capacity. During that year the production of House A. was fifty-two per sent. minus of capacity and of House C., sixty-one per cent. minus. For the eight months of 1919 the total was fifty-eight per cent. plus*, for House A. seventy-six per cent. plus, and for House C. fifty-eight per cent. minus. Thus it appears that taking both years together these houses were kept at about normal production.

I think it would be impossible to say whether this would account for the whole difference between Little's figures, corrected for materials, and the actual results at House A. and House C. That would require accurate knowledge of what is the difference of complement between full and part capacity production. However, it is clear that there would be some difference and that in any case Little's figures necessarily based upon purely hypothetical conditions may not fairly be taken against the actual practice which come so near to them in results.

If I take Sangster's figures for 1918 I find the cost of coal gas at House A. was $.31537. The cost of water-gas at House C., $.39843. Taking the proportions at twenty-two per cent. to seventy-eight per cent., and half and half, and allowing 4.1% for loss, I get, $.3964, or $.3723 respectively for these figures.

Distribution Expenses.

These expenses are made up from the books of the company, which I have already held to be good *prima facie* proof. Various items are challenged which must be taken up *seriatum:*

a.) *Repairs to meters and appliances.* These are not done directly by the company but by the Standard Company, a subsidiary whose stock is owned by the plaintiff. They are billed to the plaintiff and all items are scrutinized and checked by one of its officials. Presumably the charges include a profit based upon the assumption that the companies are independent, for

*Without deducting Fourteenth Street and Forty-second Street, which I do not find but which is too small to change the result

so the accounts read. In the case of mains and services the plaintiff does the work for the other companies and charged a profit of five per cent. I have not been able to find what the Standard's profit is on this work, but it is scarcely necessary in the case of so small an item. If I assume that the profit was ten per cent., as it is on the sales of gas between companies, there would result a deduction of Twenty-nine thousand three hundred and twenty-two dollars for 1918 and twenty-four thousand one hundred and twenty dollars for 1919. I shall so take it.

b.) *Repairs to mains and services.* These were done by the company for itself and all other companies. No profits are included and the item should be takes as it reads.

c.) " *Promotion Expense for Gas Appliances.*

d.) *and for Gas Utilization.*" These items include the cost of maintaining these departments which the company organized some years ago to push the sale of gas and of machines to burn gas. Their propriety is challenged largely because the sales have not increased much. The truth appears to be that the constantly increasing use of electricity for illumination has driven out gas more and more until to hold its sales the plaintiff must promote the use of gas for heating and cooking. It has succeeded in a slight increase of sales and its officers attribute their ability to do even so well to these departments. I have no doubt that they are right, but whether right or wrong, their decision is not now open to question. They are under a duty to keep up their sales so far as they could, and to push the use of gas in any new ways which the public would use it. Even under municipal management advertisements, when not pushed to the useless extreme which competition too often engenders, is a necessary function. In its proper sense it means not the creation of a factitious demand by the familiar processes of repeated suggestion, but genuine information in such form as to reach the public.

e.) *Salaries and* (f.) *Supplies at General Office.* The salaries of the general officers should be apportioned as the master recognized and the defendants claim, but it is very hard to find any satisfactory theory on which to allocate them. Obviously it is impossible to learn what part of his time each officer gave to gas or " non-gas " business. The method suggested of dividing in accordance with the income has few advantages except that it is an intelligible theory and has at least some relation to the facts. I shall adopt it, but only because I am taking all doubts against the plaintiff. The same applies to the Transfer, Accounting and Cashier's Departments. In the Engineering, Commercial, Purchasing and Chemical departments there can be no ground for any allocation at all. All this work presumably went for gas manufacture, and so much of it as was expended for other companies appears to have been

charged against them in the books. Mr. Woods did not apparently keep exact track of his time but the portion of his salary to be allocated is very trifling. I shall accept those items.

The rest of the charge it is hopeless to attempt exactly to apportion. I shall assume that it was shared between all the foregoing departments in the proportion of their salary accounts, and I shall deduct one-third of that part attributable to the General Offices, Transfer, Accounting and Cashier's departments. The result of this, as I make it, is Seventy-seven thousand one hundred and twenty-two dollars for 1918 and Fifty-three thousand eight hundred and thirty-seven dollars for 1919.

f.) *General Office Supplies and Expenses.* I apportion these, very roughly it is true, by deducting that percentage of the whole which the deduction from the preceding item bears to the whole item; that is, I deduct Twenty-three thousand five hundred and nine dollars for 1918 and fifteen thousand three hundred and sixty-one dollars for 1919.

g.) *Charges to United States for Officers' Services.* This item does not appear on Exhibits 364 and 365, from which I calculate the cost of distribution. I need not consider it.

h.) *Legal Expenses.* I think these should follow general officers' salaries. I deduct fourteen thousand one hundred and eighty-three dollars for 1918 and thirteen thousand three hundred dollars for 1919.

i.) *Insurance.* The insurance item covers not only some property not used in the gas business, but the Fourteenth Street and Forty-second Street plants, which, as will appear, I am eliminating from the "rate-base." These items should come out and the means of adjusting the item on that basis has not been pointed out. The defendants claim a deduction based upon the income which has been earned by the insurance funds and upon the insurance participation certificates. These certificates are issued to the plaintiff merely as evidence of the surplus in any year of the premiums over losses. It does not appear that subsequent premiums may be paid by their redelivery, but possibly this is true.

In view of the fact that the insurance premiums include property not used for gas purposes, I think I should accept the defendants' demand on this item, Seventeen thousand one hundred and forty-eight dollars for 1918, Seventeen thousand four hundred and eighty-one dollars for 1919.

j.) *Mutual Aid Society;* (k) *Superannuation.* Under these two items are charged those payments, now very common among large corporations, by which the employees receive insurance for sickness or distress or a pension when aged. There can be no question of their propriety in substance, nor can I, with deference, agree with *Kings Co. Lighting Co.* v. *Lewis*,

110 Misc. 204, 230, that the charges may not be made during the years when the disability existed. The method to be adopted is fairly open to the discretion of the officers and in the end it makes very little difference how it is distributed among consumers. The question is whether it is in fact paid and represents a reasonable amount.

In the latter question the master peremptorily shut off any inquiry in the case of superannuation. He assumed that the discretion of the officers was not subject to review, and in this he was in error, because if that discretion had been wanton or extravagant beyond reason it could not stand. However, all the details were contained in certain bundles of papers which the defendants themselves put in evidence and which showed what each allowance had been and to whom made,—at least so I understand, though the exhibits have not been submitted here. I cannot see that the cross-examination which the master stopped could have added anything of substance. The officers examined would scarcely have admitted that they considered the allowances too great, and the only available proof would have been by showing that in other companies such allowances were so much smaller than those actually allowed as to make them extravagant. This the defendants did not offer to show and no doubt could not. I do not think, therefore, that the master's erroneous ruling should throw out this item.

l.) *Automobiles.* The plaintiff uses twenty passenger cars in its business, of which seven are detailed for the use of its officers. The point was raised that this number was too many and the superintendent in charge of the department was called by the defendants apparently to establish the point. The resulting examination really goes very little into that issue and was directed for the most part to the method in which the accounts were kept. The master allowed very few questions upon that, and of this the defendants complain. I cannot see that the examination shut off was of any consequence upon the relevant issue; at least the defendants stated no reason to the master justifying his so supposing.

As to the necessity of having seven cars, I will rule here as elsewhere, in the absence of some evidence showing that they were unnecessary, or that the officers abused their powers by using them for personal purposes, that their judgment must stand *prima facie*. As in analogous situations, given the discretion, its exercise must be shown to have been injudicious. I allow the item.

m.) *Interest on Consumers' Deposits.* In whatever way figured, it seems clear that this is in no sense a proper item in the cost of distributing gas to the consumer. I am not trying to learn what were the revenues of the company in the past, but to establish a basis for the cost of distribution in the period to

be covered by a decree. I disallow this item, Forty thousand nine hundred and five dollars for 1918, Thirty-three thousand six hundred and one dollars for 1919.

n.) *Defensive Emergency Service.* This was certainly an exceptional expense caused by the troubled period of the war. It offers no just basis of inference for the costs of distribution in the future. I disallow the item, One hundred thousand two hundred and fifty-one dollars for 1918, Eleven thousand six hundred and fifty-four dollars for 1919.

o.) *Miscellaneous General Expenses.* Under this heading the defendants challenge a number of items, which are too many and too small to deserve much notice. All of them are proper enough on their face except the general item of "Miscellaneous Expenses", twenty-seven thousand two hundred and eighty dollars for 1918 and Eight thousand six hundred and fifty-four dollars for 1919. In 1918 about nine thousand dollars seems to have been connected with emergency defense. I will deduct ten thousand dollars in 1918 and in 1919 Forty-five hundred dollars, two-thirds of what apparently represented Kenney's Emergency Defense services in 1919.

In 1919 there is an item of Forty-six thousand three hundred and twenty dollars which comprises the expenses of this litigation. It can hardly be considered a normal charge for each year, and should be spread. I may assume one such suit in ten years. As we have two years to consider I will deduct Forty-one thousand six hundred and eighty-eight dollars from 1919 and add Four thousand six hundred and thirty-two to 1918.

The sum of these deductions is as follows: For 1918, Three hundred and seventeen thousand eight hundred and eight dollars, and for 1919, Two hundred and fifteen thousand five hundred and forty-two dollars. The total costs of distribution for 1918 were therefore Three million two hundred and forty-nine thousand three hundred and thirty-seven dollars, and for the first eight months of 1919 Two million three hundred and seventy thousand three hundred and nine dollars. The rate per thousand cubic feet for 1918 was $.1802 and for 1919, $.1934. A question arises as to this item whether the spread should be taken at the actual production during the years in question or at the supposed production in the future, say twenty billions. A few of the constituent factors, like repairs to mains, would seem to be pretty certainly constant whatever the production. The greater part of them, however, will vary generally with the amount of business done and in view of the severe treatment which I have given to many of them it seems to me only fair to take the spread at the actual output. There can be little doubt that at any prices now in sight the sum allowed is inadequate.

p.) *Maintenance of Conduits from Astoria.* Connected with the subject of distribution costs is the expense of keeping up the conduits from Astoria.

There are two tunnels running between Long Island and New York, one called the "Astoria Tunnel", from the Astoria plant to the Bronx, which cost $5,178,614.58; the other further south and from the New Amsterdam Company's plant to Manhattan, and called the "Ravenswood Tunnell". These are each used to conduct gas from the Astoria plant to the plaintiff's mains, the plaintiff being the sole consumer of Astoria gas. The lower or Ravenswood tunnel is used to convey coal gas which has been enriched by oil at Ravenswood; it is small and cost seven hundred thousand dollars. However, to reach it the gas must pass through mains on Long Island valued at $844,422.71. All these conduits are formally owned by the East River Gas Company and are used by others than the Astoria Company. The several corporations have adopted a figure of fifty-seven plus per cent. as representing the plaintiff's proper share of these conduits based upon their relative requirements. They have also adopted somewhat arbitrarily the figure of three and a half per cent. as proper for the renewals and repairs necessary for upkeep, the figure being taken from calculations made by the company's engineers by an average over a number of years. There was no apparent motive in fixing it at that amount, except a desire for an honest apportionment of charges between them, even though it were for bookkeeping purposes. Had the defendants wished to meet this proof the actual vouchers were available for them to do so. The estimate under the circumstances seems enough to make a *prima facie* case, but against any possibility of error I will take it at only two per cent.

However, it appears to me a closer estimate not to take the full valuation of the Astoria Tunnel and leave out the Ravenswood and the connecting lines. It is better to treat the whole system of conduits betweent Astoria and New York as one and to take a percentage of the whole. Past experience indicates fifty-seven per cent. plus, but I shall give my reasons in considering the "rate-base" for taking it higher and allowing Four million four hundred thousand dollars as the proper allocation. At two per cent. the repairs figure Eighty-eight thousand dollars, which on a spread of twenty billions, which it is proper to take on this item, is $.0044. With the other distribution cost the total is $.1846 for 1918 and $.1978 for 1919.

Taxes.

The company has calculated its own taxes and both sides start with that calculation as a basis (Exhibits 205 and 355).

a.) *Gross Earnings Tax.* The first item, New York State Gross Earnings Tax, is apportioned in accordance with the division of income between gas and "non-gas" business. This is fair and I do not understand it to be challenged.

b.) *New York Special Franchise Tax.* The next item is Spe-

cial Franchise tax. This is a tax based upon the value of the property in the streets together with the right to use the same as a public utility. It is of course plain that if franchises proper are not to figure in the "rate-base", so much of this tax as is figured on franchise as against the value of the mains and the like is improperly levied. The State should not at once levy taxes on the basis of a supposed value in the franchise and refuse to recognize that value as property on which any income may be earned. But at least while the State continues to do so, it must be content to allow the sums paid to be a credit in the account.

The only question, therefore, is of the proper allowance for the franchise tax. In 1918 these were assessed at Three hundred and eighty-four thousand two hundred and ninety-seven dollars, and in 1919, One hundred and ninety thousand six hundred and fifty-eight dollars. There would be no difficulty in allowing these sums were it not that the assessments have always resulted in contests in which the company has never but once paid the full assessment. It therefore becomes necessary to conjecture what the proper credit should be, and obviously the only basis is past experience. Between 1906 and 1914 exclusive settlements have been made on the average at the rate of less than sixty-four per cent. But in 1915 the full amount was paid, and in 1916, 1917 and 1918 the amounts already paid are a little less than seventy per cent, and it can scarcely be assumed that nothing more will ever be paid during these years, and it would probably be unfair to credit the company with only seventy per cent. in the future in fixing a rate. Nevertheless, I shall do so for the purpose of this case and allow the item in 1918 at two hundred and sixty-nine thousand dollars and in 1919 at one hundred and thirty-three thousand four hundred and sixty dollars.

c.) *Real Estate of Corporations Tax.* This is a tax levied upon the "tangible" property in the streets of New York, and if the special franchise tax is valid at all, this property has already been once assessed and taxed. There is indeed an apparent injustice in disregarding a tax levied by the State in a case to which the State is in effect a party, yet there is an equal apparent injustice in crediting the plaintiff with a tax which it insists it will never have to pay, and which is will not pay if it pays a Special Franchise tax. In such a dilemma the burden of proof must determine the issue and the item must be disallowed.

d.) *Real Estate Taxes.* Only those taxes on property held to be used and useful should be credited. Referring forward to my calculation of the "rate-base", I deduct the following items:

	1918	1919
Block 982, Lot 13.....	$8,425.20	$5,521.60
Block 988, Lot 1.....	35,813.00	23,470.67
Block 1089, Lot 1.....	57,938.00	39,053.33
Block 1090, Lot 23.....	1,433.70	957.00
Block 1107, Lot 7.....	9,110.00	6,186.67
56% of Block 985, Lot 7.....	2,811.56	1,844.60
5% of Block 989, Lot 1.....	528.05	346.05
10% of Block 1157, Lot 6.....	1,699.20	1,113.60
1/3 of Block 3236, Lot 1.....	8,016.00	5,804.00
	$126,107.71	$84,297.52

e.) *Personal Taxes.* The defendants' challenge as to personal taxes extends only to 1918, and rests upon the fact that the personal tax for that year was assumed to have been levied on gas property only, because that was done in 1919. The inference appears to me legitimate. I allow the item.

f. *United States Government Taxes.* This item is not challenged.

g.) *Interest on Taxes.* The plaintiff very ardently argues that it should be allowed a credit of interest accruing on unpaid taxes. Except in the case of special franchise taxes it is hard to see any justification for such a credit. Nor does the case seem to me different as to them either. The only theoretical credit that I can see is the difference between the interest due upon so much as they will in the end pay, and the value of the money in their hands meanwhile. In the first place it is impossible to tell what they will pay,—if it were not, I should credit them with it,— and in the second it would be a mere conjecture what was the value to them of the money in their hands.

The allowable taxes on the plaintiff were therefore for 1918 Eight hundred and thirty-one thousand six hundred and forty-five dollars and eight cents, and for 1919, Four hundred and sixty-eight thousand, ninety-two dollars and ninety-seven cents.

h.) *Astoria Taxes.* 1.) *Real Estate.* In 1918 the Astoria company paid Two hundred and sixty-four thousand seven hundred dollars and fifteen cents, and in 1919 Three hundred and seven thousand eight hundred and nineteen dollars and thirty-six cents, which should be pro-rated for eight months at two-thirds, or Two hundred and five thousand two hundred and twelve dollars and ninety cents. 2.) *Personal estate.* 1918, Seven thousand one hundred and fifty-seven dollars and forty-one cents, 1919 Seven thousand six hundred and sixty-six dollars. 3.) *Special franchise.* 1918, Three hundred and twenty-one dollars and seventy-three cents, 1919 Two hundred and ten dollars and ninety-two cents.

i.) *Conduit facilities.* As has been seen, the total investment in these conduits was Six million, seven hundred and twenty-two thousand, thirty-seven dollars and twenty-nine cents, of which I credit the plaintiff with sixty-five per cent. for reasons given later. Taking taxes at two and a half per cent. on an assessment at say two-thirds of its value, or four million, five hundred thousand dollars, the tax will be One hundred and twelve thousand five hundred dollars, of which sixty-five per cent. is Seventy-three thousand one hundred and twenty-five dollars for 1918 and Forty-eight thousand seven hundred and fifty dollars for 1919.

j.) *New Astoria plant.* There must for the future be figured an increased Astoria tax based upon the new plant now in process of erection, all of which I am allowing for reasons which will appear. The cost of that plant will be four million five hundred thousand dollars, and if I take the assessment at two-thirds, there will be added to the assessment three million dollars, on which the tax at two and a half per cent. will be seventy-five thousand dollars for 1918 and fifty thousand dollars for 1919.

The total taxes, therefore, will be as follows:

	1918	1919
Consolidated Gas Co.	$831,645.08	$468,092.97
Astoria (present plant)	276,197.29	213,089.82
Astoria (new plant)	75,000.	50,000.
Conduits	73,125.	48,750.
	$1,255,967.37	$779,932.79

Taxes can hardly be thought to vary in proportion to production, and the proper spread should be the supposed sales to be effected within the period of the decree. I have taken these at twenty billions throughout. The tax factor is therefore for 1918 $.0628 and for 1919 $.0585.

Federal Income Tax.

The company has hitherto escaped any Federal Income Tax because the United States authorites have accepted its statement that it has no net income. However, this case proceeds on the supposition that an income must be allowed it and into the calculation of a fair profit that factor must surely enter, if the company is to be upon a level with freely competing industries. At present under the Revenue Act of 1918 (Sec. 230*a*, (2)), the tax upon corporations is fixed at ten per cent., and would amount to the following sums. Assuming a capital of sixty-four million dollars without franchises, and seventy-two million dollars with franchises, and profits at six per cent. or seven per cent., the results are as follows:

	Six per cent.	Seven per cent.
Including franchises	$132,000.	$504,000.
Excluding franchises	387,000.	448,000.

On a spread of twenty billions, these figures would become for each one thousand feet of gas, as follows:

	Six per cent.	Seven per cent.
Including franchises	.0216	.0252
Excluding franchises	.0192	.0224

These figures must clearly be allowed. In fact, the calculation should be higher since the tax will be levied upon the income without any deduction for the tax itself, but that is a small variation.

Renewals and Replacements and Gas Storage.

The company has carried on its books an account each year called "Renewals and Replacements" which is in fact an amortization account. Into this is put the loss arising from the abandonment of old plants, arrived at by subtracting the salvage of the plant from its cost on the books together with the cost of withdrawal. It is possible to obtain a long average of these charges by taking the amount of gas reported sold from December thirty-first, 1907, to December thirty-first, 1918, and using it as a divisor for the sums so carried on the books over the same period. The quotient is $.0373, which the master has taken at $.03. In these cases the conclusiveness of the master's report does not obtain. *Knoxville Water Co.* v. *Knoxville, supra*, and I shall use the more exact rate.

I figure the cost of gas storage based on the years 1918 and 1919 at $.0097.

The sum of these items is $.047, which I accept.

Present Capacity and Reserve.

As a preliminary to considering the "rate-base" and indeed as an inevitable element in deciding whether or not I should include the Fourteenth Street and Forty-second Street plants, it becomes necessary to take up the company's capacity and reserve compared with its present demands. If it should appear that any plant is necessary for the reasonable future, that plant must be included, as it is today, at least at its value in modern cost of reproduction. If, on the other hand, it appears that there is a reasonable doubt about that necessity, it should be excluded.

The rated daily capacities of the present plants of the plaintiff (including Astoria) are as follows:

Fourteenth Street	5,000	(coal)
Twenty-first Street	28,500	(water)
Forty-second Street	4,500	(coal)
Ninety-ninth Street	5,500	(water)
Astoria House A	10,000	(coal)
Astoria House B	10,000	(coal)
Astoria House C	30,000	(water)
Total	93,500	thousand feet

On January thirty-first, 1920, its send-out was 99,213 thousand feet. It is certainly not unreasonable to calculate its maximum send-out at one hundred million in the future. The defendants concede that the reserve should not be less than five per cent. The plaintiff believes that much more is necessary. If I put the total requirment at on hundred and five million feet I shall be probably shaving too close for safety, even at the present demand. The master's allowance of fifteen million cubic feet out of the thirty million now building at Astoria gives only eight and a half per cent. reserve, if the Fourteenth and Forty-second Street plants are included. If they are not included the capacity is insufficient. It is clear therefore that either those plants must be included or more of the new Astoria unit.

The defendants urge that this is the wrong way to approach this subject, there being a whole system which may treat its reserve as one, and I will consider the capacity on that assumption. On January thirty-first, 1920, the maximum of the system was 166,488 thousand feet. Allowing only five per cent. reserve, the requirements are 175,000 thousand plus, which the system just has. Its resources at present are as follows:

Consolidated & Astoria (as above)	93,500	
New Amsterdam	36,000	
Standard	10,500	
New York Mutual	24,000	
Central Union	11,800	
	175,800	thousand

If the two plants on Fourteenth Street and Forty-second Street are to be disregarded, the system has no reserve at all. The defendants must therefore either allow these two plants or some part of a new plant, because it is obviously already time to build. But when building a reserve, economy and prudence require a forecast of the future. The construction of a thirty million plant at Astoria decided on in December, 1919,

as proper caution; some addition was needed, less would not ave been economical. If this be added and the two old plants e disregarded, the system has a reserve of eighteen per cent., nd the plaintiff as a member must bear its proportion of that mount; *i. e.*, it must have a capacity of one hundred and ighteen thousand. As it has by hypothesis only eighty-four illion left, it will be obliged to use sixteen million for its ctual demands and the balance of fourteen million will be less han its share of the reserve. In short, if the two plants are o be disregarded, the whole cost of the new plant must be art of the "rate-base".

I do not mean to decide that with the new plant the system as too large a reserve in twenty-three and a half per cent., hich it will have. I only mean that since it was good policy hen building to build so large a unit, the utmost that can be emanded under the most exacting theory is that if the old units e to be disregarded the whole of the new unit must be redited. The only question open is whether the old units ught not also to be included. As I am not fixing a rate, I need o no further in this case than to take the doubt against the laintiff.

Mr. Little made some elaborate calculations to show that the lants were not worked to capacity, but it is all irrelevant. ven if Astoria could make fifty-seven million feet a day and wenty-first Street thirty-three million, and Ninety-ninth treet six million, the company could not fill its present de-ands. And if the system as a whole be considered and these, s I think wholly conjectural, hypotheses be accepted, the total apacity of the system becomes only 177,300 thousand cubic et with Fourteenth Street and Forty-second Street excluded. his is a reserve above last year's demands of only 10,812 housand cubic feet, or six per cent. plus. It is absurd to sup-se that the time had not come viewed even under Mr. Little's ssumptions in which new building must be done.

For these reasons in accordance with my plan of resolving l doubts against the plaintiff, I have excluded Fourteenth treet and Forty-second Street. I include the whole of the new storia plant. It is to be remembered that in so doing the rate base" is reduced much below what it would be if the new ant had been coal-gas plants, which would have cost twice as uch. If the proportion of coal-gas to water-gas had been in is way changed to about forty-five and fifty-five per cent., it ould have involved capitalizing this unit at nine or ten million ollars at least. The addition of five million dollars to the rate-base" so involved would add $.015 or $.0175 on a spread twenty billions, according as the rate be taken at six per nt. or seven per cent. This makes the difference in distribu-on of coal and water gas count for less than one cent even

on prices in 1918. It adds a reason for disregarding the theoretical division suggested by Mr. Little.

"*Rate-Base.*"

It is possible now to calculate the "rate-base" which is composed of the following items: Real Estate, Plants, Conduits Jointly Used, Office Buildings, the Present Astoria Plant, the Astoria Plant now Building, Working Capital.

If the plants be taken at their cost, there is logic in insisting, as the defendants do, that the land shall be taken in the same way, but I have for the reasons already given refused to do either. The value of the plants is, it is true, calculated upon the basis of cost, but not, in any sense because I think cost the test; only because it is clear that at present anyway an estimate based upon cost is a most conservative one, and because it has the great advantage, as I have said, of avoiding conjectures based upon the opinions of experts.

a.) *Land Used and Useful.* The real estate of the Fourteenth Street and Forty-second Street plants will come out of the "rate-base" along with the plants themselves, for the reasons which I have just given under the heading, "Present Capacity and Reserve". This involves the following deductions:

Fourteenth Street:

Block 982, Lot 13	$326,000.
Block 988, Lot 1	390,000.
Block 991, Lot 1	180,000.
Block 991, Lot 17	56,000.
Total	$952,000.

Forty-second Street:

Block 1089, Lot 1	$900,000.
Block 1090, Lot 23	82,500.
Block 1107, Lot 7	375,000.
	$1,357,500.

I shall take up seriatim the other pieces challenged:

Block 985, Lots 7, 19 and 20. This space appears to have been used for storage and to be deemed necessary by the officers of the company, who think that they have no other available space. There is no sufficient reason to impeach their judgment. Nevertheless the westerly half of Lot 7 is occupied at present by two small holders and a boiler house. It is hard to see any use for them and no prospective use is suggested. I strike off one hundred thousand dollars at an estimate, or fifty-six per cent.; the western half must be the more valuable.

Parcel 2, *Lot* 1, *Block* 989. This easterly parcel contains a boiler plant and pumping station used in connection with two holders, one of the plaintiff, for thirty-two million feet, and the other of the New Amsterdam for five million feet. It seems that this should be pro rated in that proportion between the two. The book cost to complainant's seems to have been $20,643.84. I strike off three-eights of $20,643.84, or $7,740.

Lots 29 *and* 30, *Block* 952. Lot Thirty is an old machine shop used for storage purposes, seventy by sixty feet. In the summer of 1918 there was little in it. Lot Twenty-nine is vacant and used for storage. The company asserts that its storage facilities are small. I do not think there is any sufficient reason to upset the discretion of the officers in retaining these lots.

Part of Lot 6 *of Block* 1457. This is a very small matter but the lot seems for long to have remained unused, and an apportionment may be proper. I will strike off fifteen thousand dollars for this lot, some estimate must be made, and it will inevitably appear arbitrary under the circumstances.

The westerly three hundred feet of Lot 2 *of Block* 1157. This was formerly the site of six small holders, the westerly end of the lot being occupied at present by two four-million foot holders. This is an expensive piece of real estate and it is not likely that the company would hold it unoccupied if it had no genuine prospective use for it. There is at most a great difference of competent opinion as to the relation between the maximum output and holder capacity and the officers of the company were not obliged to accept the figure of seventy-five per cent. suggested by Hine. Little figured it at 150% of maximum capacity, which the company has not. The property has been unused for only two years and I think the time has not yet come when the company must make up its mind whether it will sell it or put up new holders. I decline to interfere with their judgment as to this property.

Lot 18 *of Block* 1683, *Lot* 2 *of Block* 1712, *the easterly* 281 *feet of lot* 5 *of Block* 1705. The first of these, so far as the evidence shows, is used for a training school. Lot 2 of Block 1712 is most essential, as it gives access to the East River. The larger part of this property is used for the Astoria Company, and in view of the way in which the case has been treated, there is no reason to distinguish between it and the plaintiff. The easterly part of Lot 5, block 1705, is used for various purposes, part of them being in use by the National Coal & Coke Company. As the revenues of this company are charged against the plaintiff, no injustice is done in allowing the whole property as in its "rate-base". Strictly, perhaps, the item should be set-off, but the difference is too trivial for notice.

North end of Lot 1 *of Block* 3236. Upon the south end of this lot is built the ten million foot Kingsbridge holder. This pur-

chase was made after considerable public feeling had been manifested in that part of the city and as a concession to the citizens by the company, which was properly made. It was necessary at the time to buy the whole tract and the portion now criticized is in the market. It think it unreasonable to require the company to attempt any residential development of the northern part owing to the character of the land itself. It is true, however, that they have kept it unused for ten years without sale. It seems to me that a time has come when the sale should be made; at least as an alternative to keeping it a part of the property on which gas profits can be made. If I take off one-third of the value, say seventy-thousand dollars, I shall certainly not be unfair to the defendants.

These are all the prices questioned of those which the master allowed. The total deductions for the sum he awarded of $9,531,275, are as follows:

Fourteenth Street	$952,000.
Forty-second Street	1,357,500.
Block 985, Lot 7	100,000.
Block 989, Lot 1	7,740.
Block 1457, Lot 6	15,000.
Block 3236, Lot 1	70,000.
Total	$2,502,240.

Leaving a balance	$9,531,275.	
	2,502,240.	
	$7,029,035.	

b.) *Reproduction Value of Plants estimated from their cost.* The books of the company show the cost of all its plants and the summaries in evidence go back to 1884, when it was organized. I have taken only those plants which remain open on the books and not all of these. The figures as of December thirty-first, 1918, are as follows:

Stations	Book Value	Part of Plant condemned
21st St. station (plant)	$3,816,273.52	
44th St. station	2,004,996.31	$1,290,412.67
63rd St. station	401,204.48	
65th St. station	817,105.37	
99th St. station (plant)	1,158,402.97	
111th St. station	1,085,862.26	
Kingsbridge holder	912,299.04	
132nd St. station	475,896.74	
132nd St. testing station	7,450.	

14th St. holder as adjusted....	584,485.20	
Engineering item	323,907.59	
Total	$11,587,883.48	$1,290,412.67
Deduction for part of plant condemned	1,290,412.67	
	$10,297,470.81	

Hine's figure for these items is $9,979,935.72, which varies in substance only as to the 111th Street station. That difference arose from his exclusion of Blocks 1704 and 1712 and 1683 as not used and useful, in which I do not agree with him, as I have said.

The books also have corresponding figures for meters, mains and services, constituting the whole fixed plant of the company.

The whole account for plants, etc., can therefore be stated as follows:

Plants	$10,297,470.81
Meters, etc.	6,631,454.32
Mains	11,027,266.54
Services	1,272,241.74
Total	$29,228,433.41

This calculation makes no allowance for depreciation, although the method by which the present value is reached is from original cost, which, as I have said, should always bear that factor in mind, even though it need not necessarily include it, when the plants have been kept up. Depreciation Maltbie and Hine figure at $6,507,400., and the answer at once occurs, that it is from any point of view more than met by the increased costs of present reproduction. Such, indeed, is the evidence so far as mere opinions and calculations of experts can justify a conclusion. Besides, there is a check, curiously conclusive at least to me, upon the cost of the plants. As I have said, the Astoria plant of thirty million foot water-gas now building will cost $4,500,000., to be completed by December of this year. The contract was let in December, 1919, and forms a good test of what the costs then were for such units, better, probably, than the opinions of witnesses. It is a fair inference from that contract that the cost in such large units was not less than one and a half millions per ten million feet capacity, and so Addicks takes it. The capacity of the only two water-gas units on Manhattan is thirty-four million, making at such rates a cost of $5,100,000. The book cost is a little short of five million dollars, a surprisingly close parallel. Therefore,

judged upon the basis of their present capacity, I may assume that the reproduction value of the Manhattan plants is at least their book value. It is of course true that in so doing I have not made any discount because they are old; I have taken the standard to be the cost of fixed capital sufficient to render the service in question and for the reasons already given. Maltbie figured a "straight-line" depreciation of three and a half millions, for all plants and holders. This was necessarily a conjecture, based upon the supposed life of the plant; it has no application while the plant is kept up. It is quite true that there is no such check upon holders and stations as in the case of plants, but on the other hand so far as opinion evidence can show, it appears without contradiction that to reproduce these would now cost a great deal more than their book cost.

The other elements of depreciation are for mains, about one million five hundred thousand dollars, and services and meters, one million five hundred thousand dollars. Any depreciation in the mains appears to me quite fanciful. Little said that the life of a main when properly buried was indefinite; the only question is of obsolescence and repairs, and I should suppose that obsolescence would occur only after it got too small for its requirements. It might of course be possible to show that all necessary mains could now be laid for less than the book cost, but the plaintiff has shown the contrary by Miller, and it is not contradicted.

As to meters and services the case is not so strong because even if their life be seventy-five years, as Little thinks, no one knows the age of all those in use. Moreover, the depreciation of one million five hundred thousand dollars is only about twelve per cent. of their cost. However, the same rule applies as before. The plaintiff proved the cost and the necessary repairs to bring the whole plant up to its original condition. It proved that the cost of reproducing fixtures of equal capacity was more than the book cost. That made a case in my judgment which was proof against any theory of "straight-line" depreciation. The allowance for repairs might be attacked on the ground that the condition of the plants and fixtures in fact required inordinate repairs, but that was not done. In accordance with the principle which I have tried to demonstrate I decline to make any allowance for depreciation.

c.) *Conduits jointly used.* I have already given my reasons for taking all the conduits used by the Astoria company rather than the Astoria tunnel alone. For the rate base the figure is fifty-seven per cent. of $6,723,037.29 or $3,832,131.25. However, since the Fourteenth Street and Forty-second Street plants are excluded, it is hardly fair to count only fifty-seven per cent. of the value of these conduits as allocatable to the plaintiff. I must assume that all the gas used by it will come

through one or the other of these conduits except what can be made at Twenty-first Street and Ninety-ninth Street. This would very substantially increase the proportionate use of the tunnels, but it would be hard to say exactly how much. In taking the valuation at $4,400,000, which is sixty-five per cent. plus, I should be within a safe estimate, and I so take it. I am supposing the Astoria capacity to be raised from fifty to eighty million cubic feet a day.

d.) *The General Office Building and the Fifty-seventh Street.* In 1914 the company erected a very large office building in New York as a place of business not only for itself but for its allied companies including the Edison Company. This is nineteen stories in height and contans besides offices proper many adjunct rooms, such as an auditorium, a restaurant, telephone booths, and other conveniences not only for the needs but for the rest and pleasure of the tenants. Its cost was $2,542,615., and the value of the land was $410,000., making an investment of $2,952,615. in all. In view of the fact that the greater part of this building was not used for gas purposes it became necessary to apportion the space between the company and its other tenants. Estimates were made as of various dates, the last being July first, 1919. At that time the company's occupation was claimed to be 113,785 square feet (including its share of the common conveniences), out of a total of 294,445, 38 per cent. of the whole. The question enter into the rate base. Dr. Weber did, it is true, figure the total rentals of the property and charge them against the plaintiff, but that would not be gas income anyway. I need only find the amount of the building properly allocatable to gas business for use in the "rate-base." Strictly speaking, a portion of the upkeep should also be credited to costs of distribution, but that is either included in another item, or has been omitted. It can hardly be of much consequence. I shall therefore consider only the apportionment in determining the "rate-base." As such, in view of the fact that the company has claimed only about 35 per cent. of the whole, the time and testimony spent upon it were hardly justified; at that percentage it would only bring into the "rate-base" a little over one million dollars.

Some allowance of course must be made; the defendants wish me to strike out eighty thousand square feet actually occupied, leaving only about $255,000 in the "rate-base", which is most unfair. Still the impossibility of precise allocation in any event, the estimate at best resting in supposition, requires a rough estimate. It is agreed that the Edison Company has sixteen hundred employees in the building and the plaintiff eight hundred. The total space, including that assigned for the common conveniences, assigned to the Edison Company, was 123,-

631. If I divide this in half and then add something in view of the fact that the higher paid employees of both companies get a larger space in any event, I can safely allot seventy thousand square feet to the plaintiff. This would leave 43,785 square feet of the building unoccupied, on the theory that the plaintiff's employees might be less spread out than they are. But the building was rightly built for the future and I shall assume that the space so theoretically vacant will be occupied in the future in the same proportions as that now occupied. I find also that that extra space was prudently built in 1914. In short, I shall deduct it from the total space and so give the plaintiff a percentage of twenty-eight upon the whole investment, *i. e.*, $846,732.20.

The Fifty-seventh Street building was built as another office in 1918 and is used only by the company. The question was debated and advice taken upon it, whether it should be a high building or not, and after consulting competent real estate brokers it was decided to build a low building. The defendants complain because that advice was followed. I decline to harry the company with such factious vexations; their discretion may or may not have been right, but there is no ground to say that a clear error was made.

As to the site, the company had the right to build upon a thoroughfare, not on a side-street. The public convenience justified it in having its quarters where they would become generally known; it might also have an eye out to the advertisement from such a location. Municipal authorities wisely select such streets for their enterprises. I allow the sum, land four hundred thousand dollars, building, $294,718.47.

The total of these is $1,541,450.57, to be added to the rate base.

(e) *Present Astoria Plant.* The present Astoria plant was begun in 1906, and there had been expended up to October 31st, 1919, $15,497,615 upon land and fixtures. This sum must come into the "rate-base" unless some part of it is not necessary for gas purposes. The defendants challenge the amount of land purchased, contending that less would have been enough, because much of it is not now in actual use. In 1914, however, when the Astoria company applied for leave to issue $14,500,000 of securities, the Public Service Commission granted that leave and it appears that the engineers of the Commission had tested all expenditures by the vouchers to the extent of seventy-five per cent. Section Sixty-nine of the Public Service Law authorizes issues only in case the expenditures have been "reasonably required" for the purposes of the company. *People ex rel. D. & H. Co.* v. *Stevens*, 197 N. Y. 1, was decided before the amendments of 1910, and it was clearly stated in *People ex. rel. B. L. H. & P. Co. v. Stevens*, 203 N. Y. 7, 21, 22,

that the commission might withhold its consent to expenditures not in the nature of permanent capital. There can be no question, I think, that the Public Service Commission could have refused to consent to the issue because all the land was not necessary, and that it is too late now to take a contrary position. At that time the fixed capital account was but a little above the issue authorized.

I shall, therefore, take it that viewed in the light of prospective requirements and the advancing cost of land, the whole area is reasonably necessary. I therefore allow the sum as of October thirty-first, 1919.

(f) *Astoria Plant now building.* The value of the Astoria plant now building is concededly $4,500,000, and for the reasons already given I include it.

(g) *Working Capital.* For working capital I take two million dollars, not because I mean to fix any such sum, but as a conservative compromise between the plaintiff's figure of $3,800,000 and Maltbie's of $1,480,000. It is in fact probably much too low, and it is clear that in spite of his subsequent testimony Little meant originally to say that there was a fairly constant proportion between working capital and production. His figure of twenty cents which at that time he gave as a minimum is twice what I have taken here.

(h) *Recapitulation.* The "rate-base" so figured without any allowance for franchises is as follows:

Land	$7,029,035
Plants	29,228,433
Conduits jointly used	4,400,000
Office buildings	1,541,450
Present Astoria plant and land	15,497,615
New Astoria plant now building	4,500,000
Working capital	2,000,000
	$64,196,533

This "investment" therefore comes on a basis of nineteen billion feet to a capitalization of $3.36 per thousand cubic feet, or $3.63 with franchises included. This is certainly too small. Little swore that in 1914 it was the consensus of engineers that a water-gas plant would cost two dollars and eighty cents and that the present costs would be double that amount, or five dollars and sixty cents. Coal-gas plants are much more expensive. It is more than probable that the plaintiff's whole investment is therefore properly valued at one hundred and fifteen millions at present prices, or twice what I have valued it at. But I go along with the master, since the result is in any case the same, in adopting the piece-meal method of valuation. That might be improper if a rate were to be fixed.

Account Stated of the Plaintiff with the Rate.

I am now in a position to state the account of the plaintiff with the rate, taking the revenues as $.7991 for gas sold and $.073 for other gas revenue, $.8721 in all. $.073 is higher than either in 1918 or the first eight months of 1919. It is $.0002 lower than the twelve months ending October 31st, 1919.

1918

Cost of production		$.3964
Cost of distribution		.1846
Taxes		.0628
Renewals and storage		.0470
		$.6908
Revenues	$.8721	
Expenses	.6908	
Available for profits	.1813	

1919

Cost of production		$.4519
Cost of distribution		.1978
Taxes		.0585
Renewals and storage		.0470
		.7552
Revenues	$.8721	
Expenses	.7552	
Available for profits	.1169	

Upon a suppositious twenty billion spread, the income on 1918 costs would be $3,626,000, which must bear a Federal income tax of ten per cent. The net would be $3,263,400. On 1919 prices the net income would be $2,104,200.

I may now determine in percentages the possible earnings of the plaintiff upon four different hypotheses: the costs of 1918 with and without including franchises and the costs of 1919 under the same alternatives.

	1918	1919
Excluding franchises	5.08%	3.28%
Including franchises	4.53%	2.92%

Such is the final result, and so it appears that even though the "tangibles" of the company are valued, not on the estimates of experts, but upon their cost,—except in the case of the land, —the company will not much more than earn upon them 5% on the basis of 1918 costs, or 3¼% on the basis of 1919 costs. If the franchises are added the earnings will be 4½% on the basis

of 1918 costs and 3% on that of 1919. As the 1919 prices have now obtained for over a year and a half, it is fair to say that in a long enough future to call for some relief, that the company cannot earn more than 3¼% on its "tangibles" alone. I doubt very much indeed whether on the present value of the "tangibles", as gathered from estimates of the most competent persons available, which is really the only way in which it can be reached at all, the company can earn more than one and a half per cent., though such estimates are of course somewhat speculative. This result was indeed to be expected. It is scarcely possible that a rate fixed in 1906 to give a fair return and presumably no more than a fair return, should today be adequate. In the figures I have used I think it clear that everything has been pared down unsparingly, and I take this occasion to say what I have already alluded to more than once already. It would be most unfair to accept any of these figures in fixing a rate. The attitude of a court is very different; it does not try to do justice between the company and the public, but only to see whether the actual rate can by any possibility still be a fair rate. In so doing it must take everything in favor of the rate. It would be the height of injustice, if, in view of that attitude, its conclusions so reached were treated as a fair basis for fixing a new rate. Furthermore, I have not hesitated to cut more ruthlessly in this case than if the result had been closer.

I conclude that the statutory rate has become unfair and violates the Fourteenth Amendment while present prices continue. The defendants must be restrained for the present from enforcing it and such a decree will pass.

Exceptions to the Master's Report.

I am somewhat embarrassed as to how to deal with the exceptions filed. I have not found it necessary to consider in most cases what were the actual facts, but only whether with every allowance they could support the rate. Nor do I think it necessary to go through all the multitudinous exceptions and make a finding on each one. I decline to do this, because in *Knoxville* v. *Knoxville Water Co.*, 212 U. S. 1, the Supreme Court has said that in rate cases a master's findings even when confirmed will not have the effect they usually do but will at most be persuasive. This I think relieves me of the necessity of passing on each exception since it would be without legal force. The two opinions of the master and myself show the extent of our agreement and difference, and so far as the findings have any persuasive effect, when I agree with them, that appears. In general they may be regarded as overruled in so far as my opinion varies from his and otherwise sustained.

Form of Decree.

Strictly the decree should merely enjoin the defendants from enforcing the statute and leave the plaintiff to fix such rates as it may choose, collecting them until the State takes some further action. That result I am unwilling to accept because it relieves the company from any regulation meanwhile and exposes the public to its estimate of what a fair rate should be. On the other hand, owing to the *casus omissus* in the law by which the Public Service Commission has no authority to fix rates above the statutory maximum, I cannot avoid this result unless I fix a rate myself or provide what I shall describe in a moment. No one suggests that I have the power to fix a rate and obviously I have not; it is a prerogative of the Legislature, delegated usually to the Public Service Commission. But as an injunction is discretionary it is possible to annex equitable conditions to it and this I should do. The Legislature will meet on January first and can readily give power to the Public Service Commission or can fix a rate itself, and it appears to me that the proper course is to anticipate that action. That is to say, I think conformity with the State law is best secured by making the rate when fixed either by the Public Service Commission or the Legislature relate back to the date of this decree. This is a very simple thing to do, because the moneys collected in excess of eighty cents must in any event be impounded pending an appeal, and the appeal can hardly be determined until after the Legislature has had an opportunity to act. I have therefore provided that the special master appointed by the statutory court, who is to receive all moneys over eighty cents shall hold the same until a new rate is fixed but not later than March first, 1921, and shall distribute them as though that rate had applied from the date of the decree.

Moreover, in spite of the plaintiff's liability, so established, ultimately to account for any sum now collected, I think that there should be some limit placed upon the sum now to be collected as security. This sum is the utmost that the plaintiff can ever receive for that period, and it should cover any rate which is within reasonable expectation.

Just as when deciding whether an actual rate is invalid a court must take all doubts in favor of the rate, so when fixing a security, it should take all doubts in favor of the plaintiff's claims. In neither case has its finding any proper relation to the rate which in justice might be established by the authorities; it is concerned only with limits.

Now the master found that the company's profit was not more than $.0473 on a capitalization of $75,000,000. This would mean on a spread of nineteen billions an income of about $900,000. At eight per cent. the net income should be $6,000,-

000., requiring a gross profit of $6,700,000. in order to pay income taxes. In short, on a spread of nineteen billions the rate would have to be $1.10 in order to make the profit which the master thought the company should get.

The company's figures are higher. They claim costs of manufacture in 1920 of $.56 and distribution costs of $.23 and taxes of about $.09. This with the amortization charge of $.035 comes to $.915 and shows a loss of $.0421 or on a spread of nineteen billions of about $800,000. It does not very definitely appear what the plaintiff claims for its "rate-base". It has put in proof that its property is worth $150,000,000. and urges that sum, but I am not clear that it means to demand 8% on that capitalization. At 8% that would require a net income of $12,000,000. and a gross before Federal income taxes come out of about $13,300,000., which with a loss of $800,000., would be $14,000,000. On a spread of twenty billions this would mean an advance of seventy cents, not thirty cents, as resulted from the master's findings.

I believe that it is reasonably clear that such an advance will under no circumstances be allowed and I think it best to accept the master's "rate-base" provisionally with the single exception of adding the full amount of the new Astoria plant. This makes a base of $77,000,000., and requires an income at 8% of $6,160,000., which with income taxes means $6,800,000., and which with $800,000. loss is $7,600,000. At a spread of nineteen billions this is forty cents, making the rate $1.20 instead of $1.10. It appears to me that it is within the bounds of possibility that the rate may be fixed so high when it is, and since the plaintiff must eventually account with the future rate in any event, I think it fair to protect it against the possibility that it may be so fixed. Any hardship to the public appears to me answered by the plaintiff's inability for any period to escape the jurisdiction of the State authorities.

I have provided that if the State does not act before March first, 1921, the plaintiff shall have all the fund and shall be free to charge what it pleases. Such inaction would indicate that the State was contented to leave the matter in that form if the decree were affirmed. If so, I should of course no longer interfere with the plaintiff in its pursuit of its rights. While that possibility is in fact too remote to be really very practical, nevertheless the decree must provide against all possible contingencies.

Stay Pending Appeal.

The decree itself fixes most of the questions which will arise pending the appeal. The stay need only provide in addition for the possible period beyond March first, 1921, before the appeal is decided. Of course it should not attempt more than to sub-

ject the sums impounded to the mandate of the Supreme Court; that court will have before it all the case and can make such final decree as it chooses.

I file herewith decrees in accordance with the foregoing.

August 4, 1920.

LEARNED HAND,
D. J.

Decree of Injunction.

United States District Court, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
against
CHARLES D. NEWTON, as Attorney-General of the State of New York; LEWIS NIXON, constituting the Public Service Commission of the Sate of New York, First District, and EDWARD SWANN, District Attorney of the County of New York, Defendants.

This cause came on again to be heard at the July, 1920, Term of this Court and was argued by counsel, and thereupon, upon consideration thereof, it is

Ordered, adjudged and decreed that the defendants, Charles D. Newton, as Attorney General of the State of New York, Edward Swann, as District Attorney of the County of New York, and Lewis Nixon, constituting the Public Service Commission of the State of New York for the First District, their successors, agents, servants and employees, be, and each of them hereby is, restrained for a period of five years from the date of the entry of this decree from suing for any penalty or forfeiture described in Chapter 125 of the Laws of 1906, or from in any other way enforcing, or attempting to enforce the said Act, or from enforcing, at attempting to enforce, an order of the Commission of Gas and Electricity of the State of New York made on the twenty-third day of February, 1906, directed against the plaintiff herein, or from taking any action under the Public Service Commission Law to enforce said statute or said order; and it is

Further ordered, adjudged and decreed, as a condition of the continuance of the injunction hereinbefore granted, that until March first, 1921, or until the earlier promulgation of a gas-rate applicable to the plaintiff by some competent authority of the State of New York, the plaintiff shall neither charge nor collect for the sale of gas in the City of New York more than the sum of One dollar and twenty cents per thousand cubic feet. And it is

Further ordered, adjudged and decreed as a further condition upon the continuance of said injunction that until March first, 1921, or until the earlier promulgation of such gas rate by such

authority the plaintiff shall on the fifteenth day of August, 1920, and on the fifteenth day of each succeeding month, pay to Richard Welling, Esq., (who is hereby appointed special master for that purpose), out of all moneys collected by it for sale of gas in the City of New York the following sums: All sums in excess of eighty cents collected from all consumers other than the City of New York; all sums in excess of seventy-five cents collected from the City of New York. And it is

Further ordered, adjudged and decreed that the said special master shall deposit all moneys so paid to him, equally in accounts in his name as special master in the New York Trust Company, the United States Mortgage & Trust Company and the Title Guarantee Company at such interest as he can best obtain, to be withdrawn therefrom only upon order of this court. And it is

Further ordered, adjudged and decreed that the said special master shall hold said moneys until March first, 1921, or until the earlier promulgation of such rate, as aforesaid, and upon the earlier promulgation of such rate the said special master shall, by order to be obtained by him, distribute the moneys so collected with accrued interest, in accordance with such rate as though the same had been in effect from the date of the entry of this decree; but if no such rate shall have been promulgated on or before March first, 1921, then he shall pay over the sums so collected with accrued interest to the plaintiff. The said special master in either case to retain therefrom his expenses and allowance when fixed by the court. And it is

Further ordered, adjudged and decreed that at any time while the injunction hereinbefore granted shall remain in force, any party hereto, including the successor in office of any of the defendants, may apply upon notice at the foot hereof to vacate, modify, or extend the foregoing injunction because of any change of circumstances since the entry hereof; or for any additional relief to which he or it may become entitled. And it is

Furthed ordered, adjudged and decreed that the plaintiff do recover its costs and disbursements when duly taxed of the defendants to be borne equally between them, and that the allowance and expenses of Abraham S. Gilbert, Esq., the special master appointed to hear and report herein, shall be fixed by the court upon motion made by any party hereto, or by the said special master and shall be paid by the defendants equally or upon their default, then out of the fund to be collected as hereinbefore described.

August 4, 1920.

LEARNED HAND,
U. S. D. J.

Amended Decree.

United States District Court, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
Against
CHARLES D. NEWTON, as Attorney-General of the State of New York; and others, Defendants.

This cause came on to be heard at the July, 1920, Term of this court and thereupon, upon consideration thereof, it is

Ordered, adjudged and decreed that in case the defendants or any one of them shall within thirty days after the entry of final decree herein appeal therefrom to the Supreme Court of the United States, then and in that case the conditions imposed upon the continuance of the injunction in said decree shall continue until the determination of such appeal and the special master appointed in said decree shall not distribute the moneys collected by him until such detrmination. And it is

Further ordered, adjudged and decreed that all moneys so collected by said special master in accordance with such decree shall at all times be held subject to the order of this court upon mandate of the Supreme Court of the United States.

August 4, 1920

LEARNED HAND,
U. S. D. J.

Supplemental Opinion.

United States District Court, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
Against
CHARLES D. NEWTON, as Attorney-General of the State of New York; and others, Defendants.

Motion to Modify the Decree and Stay.

Learned Hand, *D. J.*: The plaintiff now moves to modify the decree of August 4, 1920, in three particulars; first, the provision for depositing the excess over eighty cents impounded; second, the "retroactive" effect of the new rate when fixed, third, the absence of findings. It also moves to amend the stay by a provision seeking to expedite the appeal.

Provisions for Deposit of Moneys Impounded.

The plaintiff urges with force, I think, that to impound all the moneys over eighty cents for a period perhaps of a year will cause loss both to itself and to the consumers. It suggests that it have the right to substitute adequate securities. The best that the special master can get on the deposits is probably three and a quarter per cent.; the plaintiff if required to finance its tem-

rary requirements must pay much more, it says fourteen per
nt. In any case it will sustain a loss which will profit no one
t the banks, so far as appears. I see no advantage in insisting
on impounding the moneys if adequate security can be other-
se provided. I shall therefore modify the decree by allowing
e plaintiff to deposit with the master in lieu of cash Liberty
nds taken at their market value, or any other bonds which are
proper investment by savings banks in New York. These may
deposited with the special master originally or money already
posited may be drawn out from the banks upon substituting
ch bonds. The special master will be charged with the duty
calling upon the plaintiff for more bonds whenever their value
nals that of the cash for which they are a substitute. In
der to avoid repeated calls for such security I have therefore
ovided that the plaintiff shall in each case originally deposit
e hundred and three per cent. of the cash and that when their
rket value is equal to the cash he shall call upon the plaintiff
deposit additional bonds up to one hundred and three per
nt. of that cash. The interest upon these bonds accruing dur-
g the period of his possession shall be a part of the fund.
Also I allow the plaintiff to substitute surety company bonds
cash or to withdraw cash by giving such bonds, on the follow-
g conditions: No single company shall give a larger bond than
00,000, or more than one bond. The bond must secure not
ly the cash for which it is substituted but interest at seven
r cent. during the period of its existence, which is to be part
the funds. The plaintiff must be a party to all such bonds
d the surety company one of those recognized by the rules of
is court. Provision must be made for the possibility of delays
d extensions of time. I have required a substantial rate of
terest because the plaintiff will be in effect using the con-
mers' money. On the one hand the consumer profits by getting
re than he could from the banks, on the other the plaintiff
ofits by being relieved from high rates of interest. The rate at
ich the plaintiff has sold its bonds is seven per cent. and on
rt financing the rates are much higher. I think that seven
r cent. should be the rate, even though the plaintiff must pay
premium to get the bond; it will recover back all that the con-
mers are not eventually entitled to. In result, if I take the
aintiff at its word, the opportunity will remain favorable to
acceptance. Such bonds ought not to exceed two-thirds of
total payments required.

The Conditions Imposed Upon the Injunction.

The second point urged is that I have exceeded my jurisdic-
on by imposing as a condition upon the continuance of the
junction that the fund deposited as security shall be dis-
ibuted retroactively in accordance with the new rate when

promulgated. The argument is that by so doing I have in effect assumed the power of the New York Legislature and during this period have substituted a rate of my own making where no rate existed. Of course if I were to try to impose any such rate by any sanction other than the inducement offered by the injunction, this would be clearly true; it is equally clear that the only sanction is the injunction. If the plaintiff were absolutely entitled to an injunction as soon as the rate became confiscatory, it would also be true that the conditions I impose are unlawful. The plaintiff is not, however, absolutely entitled to an injunction, it is an equitable remedy and may be refused except on equitable conditions (*Waldon* v. *Bolley*, 14 Pet. 156, 164); the rule is of course most ancient and of the widest application. It has in effect been imposed in very similar circumstances (*State R. R. Tax cases*, 92 U. S. 575; *Cummings* v. *Natl. Bank*, 101 U. S. 163; *People's National Bank* v. *Marye*, 191 U. S. 272, 282-288). *Norwood* v. *Baker*, 177 U. S. 269, 291-294, a special assessment case, is perhaps to the contrary in effect, but only because the authorities were free to make the proper assessment. It is analogous to the situation here if the Public Service Commission had now jurisdiction to make a rate. In the other cases the taxpayer who assailed the validity of the rate was obliged to pay the proper amount of the tax, in advance, as a condition of relief. In one sense these cases go further than the decree already entered herein, since they involve an assessment and levy by the court itself. In another perhaps they do not go so far, because there is now no law applicable to the plaintiff.

If the plaintiff is right I cannot limit the rate charged in any way. Once the statute is in abeyance its rights are unregulated altogether. This is contrary to the practice, at least in this District, of fixing a rate *pendente lite*. The court must have as little jurisdiction to assume legislative prerogatives on application for temporary injunction, as on final decree. If the plaintiff's argument is good at all, it requires me to free it from all limitation as soon as the statute is found confiscatory. That argument proves too much.

There is no doubt that viewed as power alone, I might absolutely fix a rate as a condition of granting any injunction, and it makes no difference whether that rate lasted six months or six years. Any other and lower rate fixed by the State would of course in effect supersede it, but the condition of the injunction would continue to be legal. If the plaintiff chose to disregard it, it would suffer nothing but the loss of the injunction. It would then have to deal with the State authorities. That rate would be as good if fixed in a final decree as if fixed *pendente lite* or pending an appeal. But the question of power is one, and the propriety of its exercise another. I recognize that

the condition I have imposed is new, but it seems to me the minimal interference with the functions of the State as the rate-making body. The jurisdiction to suspend rates is at best somewhat invidious, and should be limited so far as possible to constitutional requirements as they now exist. Generally there is in existence a body which can at once assume jurisdiction; that will in such cases serve, but here it will not. Given this circumstance no better way occurs to me to limit the interference of this court with the action of the lawful authorities.

The plaintiff, however, appeals a little in *miscricordia*; it says that having suffered several lean years it should be allowed a short period of milk and honey. The presupposition is that the rate when fixed will be inadequate. Perhaps so, but it is scarcely an argument to which as a judge, and especially a Federal judge, I ought to listen. Within the limits which the Supreme Court has laid down I suppose the Legislature of New York may grant rates which will give questionable inducement to public service companies. They have the power, and if its exercise prove impolitic, judges have nothing to say. The new rate when established must be enough under the rules or it will be again invalid; short of that it will stand. One may say, if one likes that form of statement, that it must be presumed adequate till the contrary appears.

I decline to change this feature of the decree.

Incorporation of Findings in the Decree.

I have already considered this question, but the plaintiff is very insistent that some disposition should be made of the exceptions. In *Oliver* v. *Platt*, 3 How. 333, the decree did not dispose of the exceptions and Justice Story ignored the defect. In *Kelsey* v. *Hobby*, 16 Pet. 269, 276, the court held that where the matter was not of an exact sum due and all the evidence was in the record, it was not improper to confirm the report as a whole. A distinction should be drawn between the case at bar and one like *Kimberly* v. *Arms* (129 U. S. 512, 523-525), where the reference was of all the issues on consent and to hear and determine, when the findings are well-nigh conclusive. In the case at bar the reference was not on consent—though without objection—and it was only advisory in any case.* In such cases "the report has no legal sanction and no further weight than such as attaches to it by reason of the fact that it may embody the researches and conclusions of an intelligent master" (*Street, Fed. Eq. Prac.*, § 1516). It is, therefore,

*The order read that the special master was "to take all of the testimony and evidence respecting the issues herein, make all needed computations and fully find the facts; but nothing herein contained shall be construed as meaning that the special master's findings of fact shall be final, but only that he shall find the facts for the purpose of aiding the court and making his recommendations."

really of no consequence to dispose of the exceptions for these reasons and quite independently of the fact that this as a rate-case.

However, the point is doubtful and rather than leave it open to any difficulty on appeal I have in the amended decree confirmed specifically all these findings which I mean to confirm, and have declared that the other parts of the report are to be deemed superseded by my opinion. This can leave no doubt whatever as to what parts of the report I mean to stand. Unless I were to make findings in the declaratory part of the decree, which is never necessary. (*Street Opp. Cit.*, § 1964), I could not do more than refer to the opinion, which I have done.

I would not be understood to disagree with the master in so fas as I have not confirmed his report. Our difference resulted from the fact that I bore much more heavily than he against the plaintiff. This might not have been a feasible disposition of the case, had the result been more doubtful. I have generally, though not always, felt justified in making conclusions not based upon the actual facts, but upon the least allowance which could fairly be taken for the various items. Obviously a difference between my results and the master's does not indicate that I should not agree with him, but only that I followed a different plan in dealing with the case. As it is always proper for the court to make its own findings (*Henderson's Chancery Practice*, 487), it becomes unnecessary to do more. As now drawn I think the decree is certainly open to no procedural challenge.

Stay Pending Appeal.

I have introduced the provision suggested by the plaintiff in the stay. Perhaps it is not important but it may help expedite the appeal.

I file herewith an amended decree and an amended stay.

August 11th, 1920.

LEARNED HAND,
D. J.

Amended Decree.

United States District Court, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

against

CHARLES D. NEWTON, as Attorney General of the State of New York, and others, Defendants.

This cause came on to be further heard at the August, 1920, Term of this court and was argued by counsel; and thereupon, upon consideration thereof, it is

Ordered, adjudged and decreed that the decree of this court

hitherto entered herein on the fourth day of August, 1920, be and the same hereby is amended so as to read as follows:

United States District Court, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
against
CHARLES D. NEWTON, as Attorney General of the State of New York; LEWIS NIXON, constituting the Public Service Commission of the State of New York, First District, and EDWARD SWANN, District Attorney of the County of New York, Defendants.

This cause came on to be further heard at the July, 1920, Term of this court and was argued by counsel and thereupon, upon consideration thereof, it is

(1) Ordered, adjudged and decreed that the exceptions to the followig numbered findings of the special master in his report proper filed herein May 5, 1920, are overruled:

One, two, three, four, five, modified by adding after the words "constituent companies", the words, "excepting certain expired rights to open streets for new mains", six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, substituting for the phrase "have been keep in conformity with said rules and regulations" the phrase, "have been kept in substantial conformity with said rules and regulations", nineteen, twenty, twenty-one, twenty-two, twenty-five, twenty-six, twenty-eight, twenty-nine, thirty-three, forty, forty-one, forty-three, forty-five, forty-six, forty-eight, fifty, fifty-two, fifty-three substituting for the phrase, "have included in lieu thereof one-half of the additional investment required for the new water-gas unit," the phrase, "have included in lieu thereof and of the Fourteenth and Forty-second Street plants the whole of the additional investment required for the new water-gas unit", sixty-two modified by striking out the words, "showing a net profit with complainant company as of September, 1919, of not more than 4.73 per thousand cubic feet of gas sold", sixty-six, sixty-seven, sixty-eight, seventy-one, seventy-five, seventy-seven. And it is

(2) Further ordered, adjudged and decreed that the other exceptions to the report of said master and to his opinion as incorporated in his report are sustained, and that there are substituted therefor as findings of fact and law the findings set forth in the opinion of Learned Hand, *D. J.*, filed herein on August fourth, 1920. And it is

(3) Further ordered, adjudged and decreed that Chapter 125 of the Laws of 1906 of the State of New York in so far as it prohibits the plaintiff herein from charging or receiving more than eighty cents per thousand cubic feet for the sale of gas

in the Borough of Manhattan has been since January first, 1918, and now is confiscatory, and that said law deprives the plaintiff of its property without due process of law contrary to the Fourteenth Amendment to the Constitution of the United States. And it is

(4) Further ordered, adjudged and decreed that the said law since January first, 1918, has been and now is invalid, as violative of said Amendment, that the plaintiff has no adequate remedy at law for any injury resulting from the enforcement of said law except by injunction, and that it is entitled to the relief hereinafter prescribed. And it is

(5) Further ordered, adjudged and decreed that the defendants, Charles D. Newton, as Attorney General of the State of New York, Edward Swann, as District Attorney of the County of New York, and Lewis Nixon, constituting the Public Service Commission of the State of New York for the First District, their successors, agents, servants and employees, be, and each of them hereby is, restrained for a period of five years from the date of the entry of this decree from suing for any penalty or forfeiture described in Chapter 125 of the Laws of 1906, or from in any other way enforcing, or attempting to enforce, the said Act, or from taking any action under the Public Service Commission Law to enforce said Act; and it is

(6) Further ordered, adjudged and decreed, as a condition of the continuance of the injunction hereinbefore granted, that until March first, 1921, or until the earlier promulgation of a gas-rate applicable to the plaintiff by some competent authority of the State of New York, the plaintiff shall neither charge nor collect for the sale of gas in the City of New York more than the sum of One dollar and twenty cents per thousand cubic feet. And it is

(7) Further ordered, adjudged and decreed as a further condition upon the continuance of said injunction that until March first, 1921, or until the earlier promulgation of such gas rate by such authority the plaintiff shall on the fifteenth day of August, 1920, and on the fifteenth day of each succeeding month, pay to Richard Welling, Esq. (who is hereby appointed special master for that purpose), out of all moneys collected by it for sale of gas in the City of New York all sums in excess of eighty cents. And it is

(8) Further ordered, adjudged and decreed that the said special master shall deposit all moneys so paid to him, equally in accounts in his name as special master in the New York Trust Company, the United States Mortgage & Trust Company, and the Title Guarantee & Trust Company at such interest as he can best obtain, to be withdrawn therefrom only upon order of this court. And it is

(9) Further ordered, adjudged and decreed that the said special master shall hold said moneys until March first, 1921, or until the earlier promulgation of such rate, as aforesaid, and upon the earlier promulgation of such rate the said special master shall on order distribute the moneys so collected with accrued interest, in accordance with such rate as though the same had been in effect from the date of the entry of this decree; but if no such rate shall have been promulgated on or before March first, 1921, then he shall pay over the sums so collected with accrued interest to the plaintiff. The said special master in either case to retain therefrom his expenses and allowance when fixed by the court. And it is

(10) Further ordered, adjudged and decreed that instead of making any payment or part payment to said special master in cash hereinbefore required, the plaintiff may at its option deposit with said special master Liberty Bonds of the United States or any other bonds in which savings banks are authorized to invest under the laws of the State of New York of a market value at the time of such deposit equal to one hundred and three per cent. of the payment or part payment for which they are substituted; said bonds to be held by said special master subject to the provisions in this decree marked (9), both as to their principal and any interest accruing thereon during the period of his possession, said interest to be apportioned per diem. And whenever the market value (less subsequently accrued interest) of such bonds shall be no more than the cash for which they are a substitute, the said special master is hereby directed to call upon the plaintiff to deposit with him additional bonds sufficient to make up one hundred and three per cent. of such cash, and such deposit shall be a condition upon the further continuance of this injunction. And it is

(11) Further ordered, adjudged and decreed that the plaintiff may at any time withdraw on order any cash previously paid to the special master upon the deposit with said special master of such bonds to be held by him under the same terms as are applicable to the deposit of bonds in place of any original payment. And it is

(12) Further ordered, adjudged and decreed that instead of making any payment or part payment to said special master in cash hereinbefore required, the plaintiff may, at its option, file in court on order a surety bond in place of the same upon the following terms and conditions: All such bonds shall be executed by the plaintiff and by a surety company authorized to give bonds by the rules of this court. No surety company shall execute more than one bond and that in a sum no greater than $500,000. All bonds shall be conditioned in the payment of the sum in cash for which they are a substitute together with

seven per cent. thereon until the time of payment. All such bonds shall be further conditioned upon the payment of the principal and interest thereof in accordance with the provisions of this decree marked (9) or of any future modification thereof, and shall contain a provision that the same shall continue valid notwithstanding any future extension by decree of the period hereinbefore mentioned within which a new rate may be promulgated, and notwithstanding any further extension of payment resulting from any stay during the pendency of any appeal herein, and an other modification of this decree or of any stay in particular. Such bonds in the aggregate shall not at any time exceed two-thirds of the total payments then required by the terms of this decree. And it is

(13) Further ordered, adjudged and decreed that the plaintiff may on order at any time withdraw any moneys previously paid to the said special master upon filing any surety bond drawn as hereinbefore described. And it is

(14) Further ordered, adjudged and decreed that the foregoing provisions of this decree marked (9), (10), (11), (12), and (13) shall apply to all moneys collected by the plaintiff between July 1, 1920, and August 5, 1920, under the temporary injunction heretofore issued herein by the statutory court on June 28, 1920. And it is

(15) Further ordered, adjudged and decreed that at any time while the injunction hereinbefore granted shall remain in force, any party hereto, including the successor in office of any of the defendants, may apply upon notice at the foot hereof to vacate, modify, or extend the foregoing injunction because of any change of circumstances since the entry hereof; or for any additional relief to which he or it may become entitled. And it is

(16) Further ordered, adjudged and decreed that the plaintiff to recover its costs and disbursements when duly taxed of the defendants to be borne equally upon them, and that the allowance and expenses of Abraham S. Gilbert, Esq., the special master appointed to hear and report herein, shall be fixed by the court upon motion made by any party hereto, or by the said special master, and shall be paid by the defendants equally, or upon their default, then out of the cash, bonds, or surety bonds hereinbefore described.

August 4, 1920.

LEARNED HAND,
U. S. D. J.

LEARNED HAND,
U. S. D. J.

August 11th, 1920.

Amended Decree

United States District Court, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant.

against

CHARLES D. NEWTON, as Attorney General of the State of New York, Defendant.

This cause came on to further heard at the August, 1920, Term of this court, and was argued by counsel, and thereupon, consideration thereof, it is

Ordered, adjudged and decreed that the stay herein entered on the fourth day of August, 1920, be and the same hereby is amended so as to read as follows:

United States District Court, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant.

against

CHARLES D. NEWTON, as Attorney General of State of New York No. 2 LEWIS NIXON, constituting the Public Service Commission of the State of New York, First District, and EDWARD SWANN, District Attorney for the County of New York, Defendants.

This cause came on to be further heard at the July, 1920, Term of this court and was argued by counsel and thereupon, upon consideration thereof, it is

Ordered, adjudged and decreed that in case the defendants or any one of them shall within thirty days after the entry of final decree herein appeal therefrom to the Supreme Court of the United States, then and in that case the conditions imposed upon the continuance of the injunction in said decree shall continue until the determination of such appeal and the special master appointed in said decree shall not distribute the moneys or bonds collected by him until such determination, and the surety bonds if any given shall continue in effect until the same time, notwithstanding any extension of time given to prosecute said appeal. And it is

Further ordered, adjudged and decreed that all moneys collected by, or bonds deposited with, said special master and the proceeds of any surety bonds filed herein, in accordance with such decree shall at all times be held subject to the order of this court upon mandate of the Supreme Court of the United States. And it is

Further ordered, adjudged and decreed that this order is made, and shall continue in effect only upon the condition that the defendants, and each of them, shall perfect and prosecute

any such appeal, and print and file the record and all necessary papers to that end, promptly and without delay; and in the event that the plaintiff is at any time of the opinion that the perfecting of such appeal, the filing of the record, briefs, or other papers, or the bringing on of the appeal for argument, is being unreasonably and unnecessarily delayed by the defendants or any of them, it may apply to this court, upon notice, for such a modification of this order or other action as may be warranted in the premises.

August 4, 1920.

LEARNED HAND,
U. S. D. J.

LEARNED HAND,
U. S. D. J.

August 11th, 1920.

Petition for Appeal.

District Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant.

against

CHARLES D. NEWTON, as Attorney-General of the State of New York; and others, Defendants.

The petition of Charles D. Newton, as Attorney-General of the State of New York; Lewis Nixon, constituting the Public Service Commission of the State of New York, for the First District; and Edward Swann as District Attorney of the County of New York, shows to this Court:

First. That Charles D. Newton is the Attorney-General of the State of New York, Lewis Nixon is the member constituting the Public Service Commission of the State of New York for the First District, and Edward Swann is District Attorney of the County of New York, defendants in this action.

Second. That this is an action in equity to have declared unconstitutional chapter 125 of the Laws of 1906 of the State of New York, on the ground that the rate fixed by that act for gas sold to private consumers in the City of New York is now confiscatory.

Third. The case was tried before a special master. The trial began on or about July 15, 1919, and continued to on or about March 30, 1920. The testimony before the special master consists of approximately sixteen thousand pages of testimony and approximately one thousand exhibits.

Fourth. The special master's report was filed in the office of the clerk of the United States District Court on or about May 6, 1920. The defendants filed exceptions to the special master's

report in the office of the clerk of the United States District Court on or about May 25, 1920.

Fifth. The exceptions to the special master's report filed by the defendants came on for hearing before the District Court (Judge Learned Hand sitting) on the 6th, 7th, 8th and 9th days of July, 1920. The opinion and decree of the District Court were filed in the office of the clerk of the United States District Court, for the Southern District of New York on August 4, 1920, and the amended decrees were filed in the said clerk's office on August 11, 1920.

Sixth. The said decrees restrain the defendants from enforcing in any way chapter 125 of the Laws of 1906, of the Laws of the State of New York, and declare that the said statute violates the Fourteenth Amendment of the Constitution of the United States.

Seventh. The above named defendant Charles D. Newton, as Attorney-General of the State of New York; Lewis Nixon, constituting the Public Service Commission of the State of New York, for the First District; and Edward Swann, as District Attorney of the County of New York, feeling aggrieved by the decrees entered in the above entitled cause on the 4th day of August, 1920, and the amended decrees entered on the 11th day of August, 1920, do hereby appeal from said decrees to the Supreme Court of the United States for the reasons set forth in the assignment of errors herewith filed, and pray that their appeal be allowed and citation be issued, as provided by law, and that a transcript of the record of proceedings and documents upon which said decrees were based duly authenticated, be sent to the United States Supreme Court at Washington, D. C., under the rules and regulations of such court made and provided, on the 9th day of October, 1920, and your petitioners pray that an order be made dispensing with security.

Dated, New York, September 7th 1920.

CHARLES D. NEWTON,
Attorney General of the State of New York.
LEWIS NIXON,
Public Service Commissioner.
EDWARD SWANN,
District Attorney of New York County.
Petitioners.

UNITED STATES DISTRICT COURT.

District of New York.

EDWARD SWANN, as District Attorney of the County of New York, being duly sworn, says:

I am one of the defendants in the above entitled action. I have read the foregoing petition and the same is true of my own knowledge except as to the matters therein stated to be alleged upon information and belief, and that as to those matters I believe it to be true.

EDWARD SWANN.

Sworn to before me, this 7th
day of September, 1920.

CHARLES J. GARRISON
Notary Public, New York County, etc.

Petition and Allowance of Appeal.

District Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

against

CHARLES D. NEWTON, as Attorney-General of the State of New York; and others, Defendants.

The defendants Charles D. Newton, as Attorney-General of the State of New York, Edward Swann, as District Attorney of the County of New York, and Lewis Nixon, constituting the Public Service Commission of the State of New York, for the First District, conceiving themselves aggrieved by the decrees dated August 4, 1920, and the amended decrees dated August 11, 1920, in the above entitled cause do hereby appeal from said final decrees of August 4, 1920, and said amended decrees of August 11, 1920, to the Supreme Court of the United States for the reasons set forth in the assignment of errors filed herewith, and pray that their appeal be allowed and that citation be issued as prescribed by law, and that a transcript of the record of proceedings and documents upon which said decrees were based, duly authenticated, be sent to the United States Supreme Court situated at Washington, D. C., under the rules of said court in such cases made and provided, on or before the 9th day of October, 1920, unless further extended.

And your petitioners further pray that the bond to cover the costs of the appeal be dispensed with.

Dated New York, September 8, 1920.

CHARLES D. NEWTON,
Attorney General of the
State of New York.

EDWARD SWANN,
District Attorney of
New York County.

LEWIS NIXON,
Constituting the Public
Service Commission of
the State of New York.

Petitioners:

CHARLES D. NEWTON,
Attorney General.

WILBER W. CHAMBERS,
Solicitor for Defendant Newton,
as Attorney General,
Capitol, Albany, N. Y.

TERENCE FARLEY,
Solicitor for Defendant Nixon,
49 *Lafayette Street,*
New York City.

JOHN P. O'BRIEN,
Corporation Counsel,
Solicitor for Defendant.

EDWARD SWANN,
District Attorney of the County of
New York, Municipal Building,
Borough of Manhattan,
New York City.

Appeal allowed and bond to cover cost of appeal is dispensed with. Return of record on appeal to be filed on or before October 9, 1920, unless time further extended.

Dated New York, September 9, 1920.

MANTON,
U. S. C. J.

Assignment of Errors.

District Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
against
CHARLES D. NEWTON, as Attorney-General of the State of New York; LEWIS NIXON, constituting the Public Service Commission of the State of New York, for the First District; and EDWARD SWANN, as District Attorney of the County of New York, Defendants.

E No 15—358

Now come the defendants Charles D. Newton, as Attorney-General of the State of New York, Lewis Nixon, constituting the Public Service Commission of the State of New York for the First District, and Edward Swann, as District Attorney of the County of New York, in the above entitled cause and file the following assignment of errors upon which they will rely upon their prosecution of the appeal in the above entitled cause from the decrees made by this Honorable Court on the 4th day of August, 1920, and the amended decrees made by this Honorable Court on the 11th day of August, 1920:

1. That the District Court of the United States, Southern District of New York, erred in not granting defendants' motion to dismiss the bill of complaint, upon the ground that it failed to state facts sufficient to constitute a cause of action; among other things, for lack of an allegation that complainant had theretofore completely or substantially complied with the requirements of chapter 125 of the laws of 1906, the act which it assails in this action.

2. That the said Court erred in sustaining the report of the Special Master, denying the motion of the defendants at the end of complainant's case to dismiss the bill of complaint and overruling the exceptions of the defendants to such denial.

3. That the said Court erred in sustaining the report of the Special Master, denying the motion made by defendants at the end of the whole case to dismiss the bill of complaint and overruling the exceptions of the defendants to such denial.

4. That the said Court erred in not holding that the District Judge who appointed the Special Master was disqualified by reason of the fact that he was solicitor for several of the parties in the prior suit and was also a party defendant himself in said suit.

5. That the said Court erred in not holding that the defendants had not had a fair trial and had not had their day in court, such as is guaranteed them by the Constitution of the United States, because the Master sustained approximately 1,000 objections to important and material questions asked by

he defendants upon direct and cross-examination when no objection was made by complainant's counsel, because the Master ut off defendant's cross-examination of witnesses and ordered em from the stand before cross-examination was completed, ecause the Master dispensed with common law proof against efendants, because the Master erroneously shifted the burden f proof from complainant to defendants and because of the rejudicial manner in which the Master conducted the trial enerally.

6. That the said Court erred in not holding that it was error or the Master, without objection, to refuse to allow witness Stark to testify as to the number of societies in the General Office Building for gas company employees.

7. That the said Court erred in not holding that it was error for the Master to refuse, without objection, to allow counsel for defendants to have witness Stark make calculations in verification of certain plans offered in evidence by him.

8. That the said Court erred in not holding that it was error or the Master, without objection, to refuse to allow the witness Grundage, the sole witness called to testify to the books of account of complainant, to answer numerous pertinent and necessary questions as to entries in those books.

9. That the said Court erred in not holding that it was error for the Master peremptorily to cut off the cross-examination of the witness Addicks on the question of the advisability and possibility of the complainant's furnishing its own oil storage tanks so that oil could be bought in quantity in a favorable market.

10. That the said Court erred in not holding that it was error for the Master peremptorily to cut off the cross-examination of the witness Gawtry on the question of the manner and method of the fixation of coal prices by the Government and the result of such fixation on complainant's operations.

11. That the said Court erred in not holding that it was error for the Master peremptorily to cut off the cross-examination of witness Teele on numerous occasions when pertinent, necessary and material questions were asked concerning his examination of the books of complainant as an expert accountant, the tests he made as to their accuracy and the methods he used in making up his schedules or transcripts from them.

12. That the said Court erred in not holding that it was error for the Master peremptorily to cut off the cross-examination of witness Woods, chief engineer of complainant, on the question of the wages paid different classes of employees.

13. That the said Court erred in not holding that is was error for the Master peremptorily to refuse counsel for defendants the right to ask questions unless the purposes of the questions were first stated or unless errors in complainant's proof

could be pointed out to which the questions would be directed.

14. That the said Court erred in not holding that it was error for the Master peremptorily to cut off the cross-examination of the witness McMillin on the rate of return obtained on investments similar to that of complainant. Witness McMillin was the only witness called on this subject and his testimony that 8 per cent. is the going rate for such investments as complainant's is stated by the Court to be uncontradicted though a full and searching cross-examination, if allowed by the Master would without a doubt have destroyed the value of his testimony.

15. That the said Court erred in not holding that it was reversible and prejudicial error for the Master to sustain objections to important and material questions asked by the defendants upon direct and cross-examination when no objection was made by complainant's counsel, and that defendant's exception to such rulings of the Master should have been sustained.

16. That the said Court erred in not holding that it was prejudicial and reversible error to the defendants for the Master to cut off and curtail the cross-examination of witnesses and order them from the witness stand before cross-examination was completed, and defendants' exceptions to such rulings of the Master should have been sustained.

17. That the said Court erred in not holding that it was reversible error for the Master to dispense with common law proof on complainant's part in this case, and that the constitutional rights of the defendants were thereby invaded.

18. That the said Court erred in not holding that the Master erroneously shifted the burden of proof to the defendants.

19. That the said Court erred in not holding that it was reversible and prejudicial error for the Master to be guided in his admission of evidence offered by complainant, particularly the books of account, not entirely by the rules of law applicable to such questions but to a large extent by the supposed financial loss which would accrue to complainant if its contentions were not upheld.

20. That the said Court erred in not holding that it was prejudicial error for the Master to express himself as dissatisfied with courts and judges and the decisions thereof and in denominating as "fool statutes" certain of the enactments of the sovereign Legislature of the State of New York here under review.

21. That the said Court erred in not holding that it was prejudicial and reversible error for the Master to take the position that the judgment of the operating officials of complainant could not be attacked except on the grounds of bad faith or fraud.

22. That the said Court erred in not sustaining defendants' exception to the Master's refusal to hold that complainant came into this court of equity with unclean hands, and that the facts established against it showed that it had violated chapter 125 of the laws of 1906, in that it had not supplied to its consumers 22 candle power gas, the gas specified in the act in question, and that defendants' motion to dismiss the bill of complaint for this reason should have been granted.

23. That the said Court erred in not holding that complainant was required to show a substantial observance of the requirements of the statute as to candle power, and its failure to do so should deprive it of the favorable consideration of a court of equity.

24. That the said Court erred in failing to hold that the testimony in this case shows conclusively that complainant repeatedly and flagrantly violated the statute in question from 1916 down to the time of the trial and was violating it on the very day complainant's complaint was verified and the very day the complaint was filed in the United States District Court, and that its failure to comply with the statute in question as to candle power required a dismissal of the complaint and denial of relief to complainant. That it was likewise error for the Court to base its decision on "averages" as to candle power, and to hold that the average candle power furnished was up to the standard unless 1% is to count, and that the City was not confident of the superiority of its tests. The entire finding of the Court on the subject of compliance with the 22 candle power requirement in the statute by complainant is erroneous, and the Court erred in not adopting the defendants' proposed finding on this head contained in their exception No. 61 to finding No. 74 of the Special Master.

25. That the said Court erred in holding that the complainant company was excused from making 22 candle power gas during the period that the United States Government extracted light oils from its gas at the 99th and 21st Streets plants, because the complainant could have made 22 candle power gas regardless of the extraction of light oils from the gas by the United States Government; and further, because the United States Government did not commandeer the oil or the gas or any property of complainant; and further, because the United States Government was under contract to pay complainant for any expenditures necessary to comply with local ordinances and statutes; and consequently, it was incumbent upon complainant to supply 22 candle power gas to its consumers, and if put to additional expense thereby it could have secured reimbursement from the Government in accordance with the contract voluntarily entered into between it and the Government.

26. That the said Court erred in not holding that the Master committed reversible error by his failure repeatedly throughout the trial, upon request of the defendants to comply with Equity Rule 46 which required him, when evidence is offered and excluded and the party against whom the ruling is made excepts thereto at the time, to take and report so much of the evidence or make such statement respecting it as will clearly show the character of the evidence, the form in which it was offered, the objection made and the ruling and exception.

27. That the said Court erred in not holding that complainant has failed to establish confiscation, and the exception (62) to finding 77th of the Master should have been sustained, and the said Court's holding that the statute is confiscatory, deprives complainant of its property without due process of law contrary to the Fourteenth Amendment to the Constitution, is erroneous because complainant has enjoyed and is now enjoying a fair return on an average covering a reasonable period since the statute has been in force.

28. That the said Court erred in not holding that complainant had received a fair return on the fair value of its property from 1906 down to the close of the trial.

29. That the said Court erred in not holding that complainant failed to sustain the burden of proof cast upon it of showing beyond a reasonable doubt that said chapter 125 of the Laws of 1906 is confiscatory.

30. That the said Court erred in not holding that the period to be considered in this case was that selected by complainant in its bill of complaint, viz: from the time the statute took effect in 1906, to 1918, inclusive.

31. That the said Court erred in not holding that the statute in question should not be considered confiscatory merely upon financial results obtained in the abnormal year of 1918 and part of the abnormal year of 1919. On the contrary, the Court should have taken an average over the whole period of 1906 to the close of the trial for cost of production, capital valuation and average rate of return.

32. That the said Court erred in holding that a period of two years was enough in this case and that an average would be meaningless; that present price levels are not merely transitory; that the period of twenty months from January 1st, 1918, to August 31, 1919, is a sufficient basis for the calculation of the cost of production, and the "rate base" for a future time long enough to call for periodical action, because the present prices are abnormal and unreasonable and that the rate complainant has enjoyed and is now enjoying should not be determined on such abnormal and unusual conditions, but should be averaged over a fairly long period of time and the statute condemned only upon a showing that the average rate of re-

turn upon the fair value of the property used in the public business over such a period has not been fair.

33. That the said Court erred in not holding that the shortest period which will reflect with any reasonable accuracy the return complainant has enjoyed under the statutory rate fixed by said chapter 125 of the laws of 1906, is not less than that selected by complainant in its bill of complaint, from 1906 to 1918, and that this was especially true since the period upon which the Court below erroneously based its decision, was only the abnormal year of 1918, and a part of the abnormal year of 1919.

34. That the said Court erred in not finding that complainant has enjoyed a fair average return since the enactment of the statute which it assails, and in disregarding these remunerative returns heretofore enjoyed by complainant.

35. That the said Court erred in considering the cost of operation and valuation of the used and useful property of complainant in an abnormal period—namely, the years 1918 and 1919.

36. That the said Court erred in not holding that during the war period in the City of New York, a return of 4¾% upon the fair value of the property of complainant used in the gas business was not confiscatory.

37. That the said Court erred in not holding that the statute in question should not be declared unconstitutional unless the Court finds that the average rate of return has been less than 6% for a considerable period of time, at least from the time the statute went into effect in 1906, to the period in 1919 covered by the testimony.

38. That the said Court erred in not holding that the records of complainant company, when properly analyzed, show that it made liberal profits from its gas business during the period 1906 to 1918, inclusive.

39. That the said Court erred in not holding that the evidence shows that for the year 1918 the books of complainant, when properly analyzed and with proper allowance for the exorbitant prices paid for oil, show a net profit of over seven million dollars, which is more than a fair return upon its used and useful property invested in the gas business, being a six per cent. return upon more than $116,000,000.

40. That the said Court erred in not holding that the books of complainant when properly analyzed and with due allowance for the exorbitant prices paid for gas oil showed for the year 1919, on the basis of the first eight months of that year, a profit of over $4,500,000 which is a fair return upon all property used and useful in the gas business.

41. That the said Court erred in not holding that complainant earned on the fair value of its property used in the

public service $25,845,513—1906 to 1918, inclusive, in excess of 6% return, as shown by the table set forth in exception 5 to the Special Master Report.

42. That the said Court erred in not holding that the sum of $7,781,000 for franchises should be excluded from the property upon which complainant is entitled to a return, because complainant failed to prove that such franchises were of any value.

43. That the said Court erred in not holding that the United States Supreme Court in the prior suit did not adjudicate that complainant was entitled to a return upon a franchise of a valuation of $7,781,000.

44. That the said Court erred in not holding that complainant's franchises have now expired and it is not entitled to any return thereon.

45. That it was error for the said Court to add $7,781,000 for franchises to the rate base, and likewise error to overrule exceptions numbered "5," "6," "7," "8," "9," "10," "52," "57," to the findings of the Master on the value of the property because the rule is that such franchises should be excluded from the property upon which the company is entitled to a fair return; because the complainant failed to prove that the franchises were of any value or that anything was ever paid for such franchises; because the franchises have expired by limitation, and because the decision in the prior suit made no binding adjudication upon the value of such franchises which the said Court was bound to accept here.

46. That the said Court erred in not holding that during the present war period (1918 and 1919) a proper rate of return or profit was and is from 4 to 4¾%, because that is the rate of return which the United States pays its citizens on investments of approximately $35,000,000,000 in Liberty Bonds, and is a fair return during the abnormal and unusual period of the war.

47. That the said Court erred in holding that any rate of return less than 6% would be insufficient in this case, because there is no evidence or rule of law upon which to base such a finding.

48. That the said Court erred in not holding that complainant has an unliquidated claim against the United States Government because the Government extracted light oils from its gas at the 99th and 21st street stations during a part of 1918, and that the Court should have held that until this claim has been decided, there can be no safe basis for disposing of the case, for while the amount of such claim is unknown, yet it may be so substantial that when it is credited to 1918 operating expenses it will give complainant a return far in excess of that now shown.

). That the said Court erred in not holding that the books
ccount of complainant (Exhibits 188-200, 204, 260-280)
ch were introduced in evidence, were improperly admitted
the ruling in admitting them was erroneous and calls for
w trial, because the books were not books of original entry;
t the one who made the entries therein was not produced
their accuracy proven or his death or unavoidable absence
blished, and exception "14" to the Master's finding "18"
uld have been sustained for such reasons.

0. That the said Court erred in not holding that the books
omplainant offered in evidence were not kept in conformity
h the uniform system of accounts of the Public Service
mmission and that proof of compliance with the Uniform
stem of Accounts of the Public Service Commission would
t be proof of their accuracy and would not make them
mpetent in this action until properly proven, because they
re not books of original entry, their accuracy was not proven,
d some of them were written long before the said uniform
stem of accounts was established.

51. That the said Court erred in not holding that there
as an absence of competent proof by the complainant to
tablish the amount of gas made and sold by it, because the
ly evidence on the subject were the books which were im-
operly admitted in evidence.

52. That the said Court erred in not holding that there
as an absence of competent proof by the complainant to
tablish its cost of the manufacture and distribution of gas, be-
use the only evidence on the subject were the books which
ere improperly admitted in evidence.

53. That the said Court erred in not holding that the com-
lainant has failed to prove that its business has been run
ficiently, honestly, economically and prudently.

54. That the said Court erred in not holding that the com-
lainant had failed to operate its Astoria plant to its fullest
apacity as was shown by the testimony of Mr. Little.

55. That the said Court erred in not holding that the com-
lainant could have effected substantial economy in the manu-
acture of its gas had it used crude oil which could have been
urchased at a much cheaper price than the gas oil used.

56. That the said Court erred in not holding that had the
omplainant adopted the coke oven or chamber oven process
f making gas, it could have made gas at a less cost than by
he present method of manufacture, as shown by the uncon-
radicted testimony of Mr. Little, and that it was incumbent
pon complainant to adopt one of those methods.

57. That the said Court erred in not holding that there was
n absence of competent proof by the complainant to prove the
mount of material used by it in the manufacture of gas, be-

cause the only evidence in the case of such material were the books which were improperly admitted in evidence, and also the testimony of witness Woods, which was also incompetent and based upon a purely hypothetical state of facts.

58. That the said Court erred in not holding that complainant should have purchased its gas oil during the period considered by the Court, at least 3c. cheaper per gallon than it claimed to have paid, inasmuch as the evidence showed that large companies were purchasing oil in large quantities during the same period at a price at least 3c. per gallon less than complainant claimed to have paid. Complainant should have made five-year contracts in 1914 or 1915, and had it done so, such a saving would have resulted. The Court's holding that the price of 6.9c., including lighterage, should be accepted is erroneous for the reasons assigned above and for the additional reason that it failed satisfactorily to establish that this was the best price obtainable or that its dealings with the Standard Oil Company were free from collusion. Exception "16" to the Master's finding "20" should have been sustained and the proposed finding contained in the exception adopted.

59. That the said Court erred in taking as a basis for the calculation of the cost of production of coal gas a portion of the plant of the Astoria Light, Heat and Power Company for the reason that the amount of coal used in that plant was inordinately high during 1918 and 1919 and the price obtained for the coke produced was inordinately low, particularly in 1919.

60. That the said Court erred in taking 4.12 gallons as the quantity of oil necessarily used in the production of one thousand cubic feet of water gas, for the reason that an average use of such oil in the 99th Street plant of complainant company for the years 1909 to 1918 inclusive was only 3.81 gallons per 1,000 cubic feet and since complainant should be held to a cost of production based upon the greatest possible efficiency this figure of 3.81 gallons per 1,000 should have been used which would have resulted in a saving of over 2 cents per 1,000 cubic feet made.

61. That the said Court erred in arriving at its cost of distribution per 1,000 cubic feet sold by dividing the actual cost of distribution by the number of 1,000 cubic feet sold in 1918 and 1919 respectively rather than by the number which will probably be sold in 1920, for these distribution costs do not increase with the amount sold, but are relatively fixed.

62. That the said Court erred in holding that complainant should be allowed in its expense account for franchise tax in 1918 $269,000, and in 1919 $133,460 for the reason that these amounts, though less than the assessment are more than the amount actually paid which will no doubt be all that complainant will ever be called upon to pay.

63. That the said Court erred in holding that there should be included in complainant's expense account the taxes on the following parcels of property: Block 952, Lots 29 and 30, Block 1157, Lot 1, Block 2175, Block 1683, Lot 18, Block 1712, Lot 2, the easterly 281 feet of Block 1704, Lot 5, and Block 690, Lots 40, 42, 43, 44, 45, 48, 49, 50, 51, 52 and 53, for the reason that none of these parcels of property are used and useful in gas business of complainant company.

64. That the said Court erred in holding that the rated daily capacities of the various plants of complainant and its allied companies were an accurate indication of the actual capacities of such plants and in basing upon such rated daily capacity the necessary reserve of the system for the reason that practically all of the plants of the system can and have produced day after day from 10 to 25% more than their rated daily capacity and those which do not and have not done so could have done so if it had been desired.

65. That the said Court erred in not holding that there should be deducted, as an improper item of expense, for repairs to meters and appliances for 1918, the sum of $322,539.50; for 1919, $265,116.55, because all such repairs are made by the Standard Gas Light Company, and the books of that company were not produced and no evidence offered that the charges were reasonable.

66. That the said Court erred in not deducting for repairs to mains and services for 1918 the sum of $160,823.45, and for the first eight months of 1919, the sum of $103,959.04, because these were unproven. Complainant does all repair work on mains and services for the affiliated companies. The basis on which this is done was not satisfactorily shown.

67. That the said Court erred in not deducting from the distribution expenses, as an improper item, for 1918, for promotion expenses, gas appliances department, $173,041.23; and for the utilization department $33,033.67; and for the same items for the first eight months of 1919, the sums of $122,015.25 and $20,544.70, because this expense was not shown to have been justified or to have been made entirely for complainant, nor was it shown that the gas business was not sacrificed to the advantage of the electrical business carried on by certain subsidiaries of complainant.

68. That the said Court erred in not deducting from distribution expenses for 1918, as an improper item, for salaries, supplies and expenses of the general office, $145,644.45, and for the same item for the first eight months of 1919, $102,507.46. There was no satisfactory proof of how much of this expenditure should be allocated to the gas business of complainant company. The Court allowed some deductions.

69. That the said Court erred in not crediting the 1918 dis-

tribution expenses, with the sum of $36,728.50, the amount charged the United State Government for officers' services at $150 per day. The Court misconceived defendants' claim here. This should have been included as a credit, and not having been so included should be credited to gas revenues of complainant for the year.

70. That the said Court erred in not deducting for legal expenses for the first eight months of 1919 the sum of $28,333.33, instead of $13,300.00. The Court failed to make a proper analysis of the vouchers underlying this expense; had it done so it would have deducted the first sum above mentioned.

71. That the said Court erred in not deducting for the year 1918, for Mutual Aid Society, an improper item, the sum of $40,327.71; for the first eight months of 1919, the sum of $22,532.48. This expenditure was not necessary in the gas business, was not properly proven and should have been disallowed.

72. That the said Court erred in not deducting for superannuation for 1918 the sum of $65,704.22, and for the first eight months of 1919, the sum of $47,361.03 There was no proof that these sums were spent in pursuance of a reasonable plan for a superannuation fund to be collected during the period of service of the employees put upon the superannuation roll.

73. That the said Court erred in not deducting, as an improper item, for distribution expenses for automobiles in 1918, $146,111.75, and for the first eight months of 1919, $95,507.11, for the expense was exorbitant and lacks any element of substantiation.

74. That the said Court erred in not disallowing as an improper expense $60,471.19, appearing under miscellaneous general expenses, and under the same item for 1919, $81,829.91. This expense was not proven to be applicable to the gas business and was patently improper.

75. That the said Court erred in not holding that there should be a credit to distribution expenses for 1918 of the rent of the main office building of $100,000 and an amount for the first eight months of 1919, $66,666.00, for the evidence showed that space unnecessarily occupied by complainant in this building could have been rented for the amount stated.

76. That the said Court erred in not holding that there should be a credit for loss on the 57th street building for 1918, $36,000, and the sum of $24,000 for the first eight months of 1919, because this building was an inadequate improvement on the land, should not be included in the rate base, since necessary and equivalent space could have been rented at an annual saving of $36,000.

77. That the said Court erred in making any allowance for maintenance of conduits from the Astoria plant, because this was not proven.

78. That the said Court erred in not eliminating entirely from the cost of distribution any charge for the maintenance of the Astoria Tunnel, because this was not properly proven.

79. That the said Court erred in not disallowing entirely the item of $23,309 for personal property tax in 1918, because this tax was not shown to be against gas property.

80. That the said Court erred in allowing any tax on the Astoria plant, because it was not proven.

81. That the said Court erred in not deducting for taxes on the Astoria tunnel the sum of $123,022.59, because this tax was not proven, nor was it on complainant's property used in the gas business.

82. That the said Court erred in not holding that the expense of the gas business of complainant and the amount available as a return upon the investment for the years 1906 to 1918, were as follows:

Summary of Investment in Property Used in the Gas Business and Return Thereon, 1906-1918.

Year	Capital sum per AA466	General Office Property (a)	Astoria Investment (b)	Total Investment (c)	Return Computed at 6 per cent.	Actual return	Excess over 6% return	7c. "contingent return" Item (d)
1906	$21,937,190	$65,173	$8,385,000	$30,387,363	$1,823,242	$4,865,429	$3,042,187	$971,581
1907	22,413,477	65,199	10,432,302	32,910,978	1,974,659	3,969,746	1,995,087	1,032,656
1908	22,493,822	65,224	10,832,302	33,391,348	2,003,481	3,470,306	1,466,825	1,006,682
1909	22,146,839	69,772	11,082,302	33,298,913	1,997,935	4,501,457	2,503,522	1,070,919
1910	23,193,132	75,290	11,382,302	34,650,714	2,079,043	4,820,853	2,741,810	1,123,099
1911	24,462,223	260,977	13,482,302	38,205,502	2,292,330	4,783,465	2,491,135	1,132,261
1912	25,677,990	637,436	14,582,302	40,897,728	2,453,864	4,564,349	2,110,485	1,164,878
1913	26,168,540	1,887,293	15,682,302	43,738,135	2,624,288	4,595,746	1,971,458	1,158,761
1914	25,626,427	3,298,736	15,500,000	44,425,163	2,665,510	4,351,628	1,686,118	1,155,623
1915	25,071,952	3,388,401	16,500,000	45,010,531	2,700,632	5,004,662	2,304,030	783,991
1916	25,007,819	3,031,605	16,500,000	44,858,535	2,691,512	4,892,752	2,201,240	.....
1917	25,207,061	3,041,380	16,500,000	45,207,701	2,712,462	3,842,156	1,129,694	.....
1918	25,642,645	3,045,848	16,500,000	45,776,001	2,746,560	(e)2,948,482	201,922	.....
					$30,765,518	$56,611,031	$25,845,513	$10,600,452

(a) From Exhibit AA466, plus $101,938 for cost of easterly extention, 1915-1918 ($45,338 land, and $56,600 building).
(b) From A. Sangster's report (p. 11762, lines 1-3).
(c) Includes cost of W. 57th St. branch office building (AA466) plus $300,000 for necessary land per testimony of J. J. Boylan ($50,178 in 1915, $319,111 in 1916, $459,260 in 1917, and $587,508 in 1918).
(d) Being the difference between the company's charge of 10c. per M sold 1906-1914, and 3c. included in expense in defendant's summary. In 1915, the last year the charge was reported in operating expenses, the difference was only 5c.
(e) From Exhibit AA465.

83. That the said Court erred in holding that there should be included in the expenses for distribution and operation, anything for keeping up the conduits from Astoria, since this was not proven.

84. That the said Court erred in holding that there should be included in the expenses for distribution and operation, anything for taxes on the new Astoria plant, because this plant was not built, was not within the issues, and is not now used in the gas business of complainant.

85. That the said Court erred in holding that there should be any allowance for Federal Income Tax. The Master excluded this tax and to his ruling no exception was filed by complainant. The question, therefore, was not open when the case was before the United States District Court for the Southern District of New York, and the inclusion of any amount was erroneous. Moreover, this is a tax against the stockholders and not against the consumers.

86. That the said Court erred in allowing $.0476 per thousand cubic feet sold for renewals and replacements and gas storage. The Master held that $.04 was enough. No exception was taken to his finding by complainant. The question was not open before the Court and any allowance in excess of $.04 is improper.

87. That the said Court erred in including the so-called new Astoria plant in the rate base because this was not within the issues, was not built, is not in operation and should not be considered.

88. That the said Court erred in not excluding entirely from the rate base Block 952, lots 29 and 30, on the ground that said property is not used and useful in the gas business.

89. That the said Court erred in not excluding from the rate base Block 1457, part of lot 6, on the ground that same was not used and useful in the gas business.

90. That the said Court erred in not excluding from the rate base the easterly 300 feet of Block 1157, lot 1, for the reason that same was not used and useful in the gas business.

91. That the said Court erred in not excluding entirely from the rate base Block 2175, on the ground that the same was not reasonably used and useful in the gas business.

92. That the said Court erred in not excluding entirely from the rate base Block 1683, lot 18, Block 1712, lot 2, and the easterly 281 feet of Block 1704, lot 5, on the ground that the same was not reasonably used and useful.

93. That the said Court erred in not excluding entirely from the rate base for the period from 1906 to 1915, Block 690, lots 40, 41, 42, 43, 44, 45, 48, 50, 51, 52, and 53, on the ground that the same was not used and useful.

94. That the said Court erred in not holding that the 57th

Street office building was not an adequate improvement upon the land upon which it was erected and should not be included in the rate base, because not used and useful.

95. That the said Court erred in not holding that the fair value of complainant's property upon which it is entitled to a return did not exceed the following amounts for the respective years stated:

A. Founded Upon Cost.

1906	$22,022,363
1907	22,478,676
1908	22,559,046
1909	22,216,611
1910	23,268,412
1911	24,723,204
1912	26,316,426
1913	28,055,833
1914	28,925,163
1915	28,358,415
1916	27,937,486
1917	28,146,503
1918	28,586,555

B. Founded on Assessed Values of Land and Actual Cost of Other Tangible and Intangible Property.

1906	$25,534,521
1907	26,394,287
1908	26,769,463
1909	26,529,778
1910	27,651,971
1911	29,553,788
1912	31,263,842
1913	32,822,520
1914	33,077,161
1915	32,177,710
1916	31,702,067
1917	32,049,839
1918	32,589,146

Because these figures were correct and were taken from complainant's books, and that Table 295, Defendants' Ex. AA466 printed below, correctly shows the rate base in detail founded on the cost, year by year.

		1906	1907	19
1.	Land	$1,964,589	$1,970,289	$1,9
2.	Other Fixed Capital	18,567,801	18,953,188	19,0
3.	Working Capital	1,205,000	1,290,000	1,3
4.	Construction Capital	200,000	180,000	2
5.	Engineering, Administration, etc			Includ
6.	Organization			None
7.	Interest & Taxes			None
8.	Franchises			Actual co
9.	Going Value			None
10.	Total	$21,937,190	$22,413,477	$22,4
11.	General Office Property:			
	a—Land	$65,173	$65,199	$
	b—Building (a)	.....	.....	.
12.	W. 57th St. Property:			
	a—Land	.....	.....	.
	b—Building	.....	.....	.

(a) The general office building in the years 1906, 1907 and 1908, is included in "C
If the general office building is to be included in the rate base, the figure

DEFENDANTS' EXHIBIT AA-466.

Table 295. Rate Base Founded on Cost, 1908-1918.

1908	1909	1910	1911	1912	1913
,958,783	$1,958,783	$2,063,884	$2,080,753	$2,072,632	$1,944,232
),045,039	19,168,056	19,929,248	21,141,470	22,405,358	23,114,308
,310,000	820,000	900,000	940,000	900,000	910,000
200,000	300,000	300,000	300,000	300,000	200,000
added in the above figures.					
e found separate from above figures.					
e found separate from above figures.					
ial cost not obtainable—books of original companies not produced.					
e claimed by complainant.					
2,493,822	$22,146,839	$23,193,132	$24,462,223	$25,677,990	$26,168,540
$65,224	$65,224	$65,224	$65,224	$233,290	$401,295
.....	4,548	10,056	195,753	404,176	1,485,998
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....

"Other Fixed Capital" above; the amounts in the other years represents the net c
ures for the cost of land and building here given should be added to the total co

1914	1915	1916	1917	1918
$1,733,142	$1,696,779	$1,696,602	$1,671,866	$1,653,809
22,813,285	22,365,173	22,261,217	22,335,195	22,508,836
900,000	830,000	870,000	1,020,000	1,300,000
180,000	180,000	180,000	180,000	180,000
25,626,427	$25,071,952	$25,007,819	$25,207,061	$25,642,645
$401,295	$401,295	$401,295	$401,295	$401,295
2,897,441	2,885,168	2,528,372	2,538,147	2,542,615
.....	66,904	401,453	401,484	401,490
.....	.....	19,111	159,360	287,508

t of additions and finally of the large new building, now in use.
given above.

96. That the said Court erred in holding that the conduits jointly used should be included in the rate base at $4,000,000, for the reason that neither the value of such conduits nor the proportion used by complainant were properly proven.

97. That the said Court erred in including the 57th Street office building in the rate base in the sum of $400,000 for land, $294,718.47 for building, for the reason that complainant did not need this building and the gas consumers should not carry it.

98. That the said Court erred in including the present Astoria Plant in the rate base in the sum of $15,497,615.00, for the reason that its fair value was not proven.

99. That the said Court erred in holding that the action of the Public Service Commission in approving the issuance of bonds for the purchase of the land now owned by the Astoria Light, Heat and Power Company was conclusive upon the question of the reasonability of that purchase or the present usefulness of the land purchased for the reason that at the time such land was purchased it was contemplated that the Astoria company would erect thereon a plant five times as large as that so far erected, that this plan for a tremendous plant at Astoria has practically been abandoned and the excess land is no longer needed; and for the further reason that the action of the Public Service Commission in that regard is not binding or conclusive upon a court of equity.

100. That the said Court erred in including the Astoria new unit in the rate base in the sum of $4,500,000, for the reason that this was not within the issue, has not been built, is not now used and useful, and the present consumers of complainant should not carry it.

101. That the said Court erred in not depreciating the various pieces of property included in the rate base, exclusive of land, for the reason that the rule is not well settled that depreciation must be allowed and considered.

102. That the said Court erred in holding that so far as concerns the future, the age of the plant should not be a function of the rate base. The entire finding of the Court on depreciation is erroneous, and the Court should have adopted the figures set forth in Exhibits AA425, AA426, AA466 on depreciation.

103. That the said Court erred in allowing $2,000,000 for working capital, for the reason that this amount is excessive. The amount for working capital should not exceed $1,300,000.

104. That the said Court erred in not taking the figure of $1,300,000 for working capital, for this amount was ample and the proof sustains such figures.

105. That the said Court erred in not holding that the Master committed reversible error in the admission and exclusion of evidence in the following particulars:

(a) Refusal to admit in evidence the general profit and loss account from December 31, 1905, to December 31, 1918, of complainant company. Defendants' Exhibit AA127 for Identification.

(b) Refusal to admit in evidence the comparative balance sheet of complainant from December 31, 1905, to December 31, 1918, showing assets and liabilities of complainant company for each year.

(c) Refusal to admit in evidence what is known as the Marwick-Mitchell & Company report. This was an exhibit in the prior suit. It was a tabulation of the cost of certain property of complainant company claimed here as used and useful.

(d) It was error to refuse to permit the witness Edgerton to testify that the 14th and 42d Street plants were not used and useful and error not to have taken so much of the testimony as would indicate what it was in compliance with Equity Rule 46.

(e) Refusal to permit defendants to bring out from the secretary of the complainant company that he had received interest on the amount collected by complainant company in excess of the 80c. rate under the fund accumulated in the prior suit, amounting to $6,936,175.20.

(f) Exclusion of tables prepared by Dr. Weber, chief statistician of the Public Service Commission, called by defendants, showing the sources of the fund invested in property and in securities owned by the Consolidated Gas Company December 31, 1918.

(g) Refusal to admit any testimony showing the tests made by the City of New York concerning the quality of gas furnished its consumers prior to 1916.

(h) Admission in evidence of "every voucher, every bill, every record, every paper, every report, which is reflected in these books of account."

(i) Admission in evidence of Complainant's Exhibits 205, 283-288, 290-294, 303-304, 317, 319-326, 327, 331, 332, 335, 337, 338, 340-347, 350, 355, 364-368, 382, 389, 401, 407-409, which are in the main tabulations or transcripts made from the books, erroneously admitted in evidence.

(j) Refusal to permit witness Boylan to testify in regard to the necessary space needed by complainant company in the 57th Street office building.

(k) Refusal of the testimony of witness Bemis upon his opinion as to candle power requirements.

(l) Refusal of Master to admit in evidence contract between Seaboard By-Products Coke Company with the Public Service Corporation of New Jersey in regard to price of coke oven gas.

(m) Refusal to admit in evidence letter by secretary of complainant dated Nov. 30, 1917, to Public Service Commission of the number of open flame burners used by complainant's consumers.

(n) Refusal to permit Mr. Little to testify in regard to candle power provision in statute when open flame burners are used.

106. That the said Court erred in holding that the cost of production, distribution, taxes, renewals and storage in 1918, amounted to $.6908, and likewise erred in holding that the cost of production, cost of distribution, taxes, renewals and storage for 1919, amounted to $.7552 per thousand cubic feet, because such finding is not in accordance with the evidence.

107. That the said Court erred in holding that the net return in 1918 on complainant's property, including franchises, was 4.53%, and excluding franchises, was 5.08%, and that said return in 1919 on complainant's property, including franchises, was 2.92%, and excluding franchises, was 3.28% for the reason that the production costs taken by the Court are far too high and were not properly proven while the rate base found by the Court is far too high and has no basis in the proof.

108. That the said Court erred in holding that the statutory rate has become unfair and violates the Fourteenth Amendment of the Constitution while the present prices continue, and in restraining in defendants for the present from enforcing the statute, because such finding is not in accordance with the evidence.

109. That the said Court erred in adjudging that complainant may collect the sum of $1.20 per thousand cubic feet for gas sold in the City of New York, because there is no justification for such a rate and the statute is valid and fixes the rate of 80c. per thousand cubic feet.

110. That the said Court erred in adjudging that complainant recover costs and disbursements of the defendants.

111. That the said Court erred in adjudging that the allowance of the Special Master be paid by the defendants equally, because the complaint should have been dismissed and the trial was improperly conducted by the Master.

112. That the said Court erred in including all property regardless of the source whence the money came to pay for it, and regardless of the fact that depreciation and other reserves built up out of income from gas rates had been reinvested in the plant and had produced or paid for the property which is included in

the rate base and improperly so according to the decisions of the United States Courts.

113. That the said Court erred in not deducting depreciation in determining the value of the property. The Court's acceptance of book cost or reproduction cost without allowance for depreciation due to any cause was contrary to the rule laid down by the United States Supreme Court.

114. That the said Court erred in determining that the value of the property should be determined upon the basis of was time and current abnormal prices for labor and materials.

115. That the said Court erred in deciding that "the proper standard for 'rate base' is the present cost of a substitute plant of equal capacity," whereas the Court should have taken the actual cost of the property, including therein such property as was acquired or constructed necessary to serve gas consumers at the unusually high prices prevailing since 1916, deducting from the amount thus obtained the decline in worth or value due to all causes such as wear and tear and decay, age, obsolescence and inadequacy.

116. That the said Court erred in not striking out the testimony of Colin C. Simpson, Frederic J. Mayer and Edmund C. Preiss, whose testimony was read from the record in the prior suit, on the ground that the testimony of said deceased witnesses was incompetent, irrevelant and immaterial, and not entitled to be read in this suit, and because the present action was not between the same parties and was not a retrial of the former action.

117. That the said Court erred in not including all of the subsidiary companies in the system in determining the issues in this action, because it was not fair to take one or two companies and exclude all the others. Either all should have been included or not any.

118. That the said Court erred in including the Astoria Light, Heat & Power Company, one of the subsidiary companies, and the Astoria and Ravenswood tunnels in the rate base and in operating expenses; whereas, the Court should have based its decision entirely upon the Consolidated Gas Company alone, or else have included all the subsidiary companies in the Consolidated Gas system supplying gas in the Borough of Manhattan.

119. That the said Court erred in accepting book cost of certain classes of property as the fair value upon which the company is entitled to a return, because he should have taken the actual cost of the used and useful property. As the Court itself said: "the inaction of the authorities in the past gives no prescription" and without such prescription the book entries made in 1884 based, as the Court says, upon the market value of the

securities of the predecessor companies, have no probative force in determining either book cost or actual cost.

Dated September 7th, 1920.

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By the Honorable, one of the Judges of the District Court of the United States for the Southern District of New York.

To the Consolidated Gas Company of New York:
Greetings:

YOU ARE HEREBY CITED and admonished to be and appear at a term of the Supreme Court of the United States to be holden in the city of Washington, D. C., in the District of Columbia, on the 9th day of October, 1920, pursuant to an appeal filed in the clerk's office of the District of New York, wherein Charles D. Newton, as Attorney-General of the State of New York, Lewis Nixon, constituting the Public Service Commission of the State of New York, for the First District, and Edward Swann, as District Attorney of the County of New York, are appellants, and to show cause, if any there be, why the decrees entered on the 4th day of August, 1920, and the amended decrees entered on the 11th day of August, 1920, in the United States District Court for the Southern District of New York, should not be corrected and reversed and speedy justice should not be done in that behalf.

Given under my hand at the Borough of Manhattan, in the city of New York, in the District above named, this 9th day of September, in the year of our Lord, One Thousand Nine Hundred and Twenty, and of the Independence of the United States the One Hundred and Forty-fifth.

MANTON,
U. S. Circuit Judge for the Second Circuit.